

INFORMATION HANDOUT

For Contract No. 01-262054

Men-101-45/50.8

IN MENDOCINO COUNTY IN AND NEAR WILLITS AT VARIOUS LOCATIONS

Identified by
Project ID 0115000013

PERMITS

UNITED STATES ARMY CORPS OF ENGINEERS

PERMIT No.1991-194740N.

STATE OF CALIFORNIA, DEPARTMENT OF FISH AND GAME, STREAMBED ALTERATION AGREEMENT
AGREEMENT NO. 1600-2010-0044R1

STATE OF CALIFORNIA, DEPARTMENT OF FISH AND GAME, INCIDENTAL TAKE PERMIT
ITP NO.2081-2010-007-01

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, NORTH COAST REGION
BOARD ORDER NO. 2003-0017-DWQ, WDID NO. 1B10019WNME

STATE OF CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, AMENDMENT AND EXTEND LAKE OR
STREAMBED ALTERATION AGREEMENT, MARCH 10, 2014
AGREEMENT NO. 1600-2010-0044R1

STATE OF CALIFORNIA DEPARTMENT OF FISH AND GAME, A MINOR AMENDMENT NO. 1 INCIDENTAL
TAKE PERMIT (JULY 14, 2010) AND ATTACHMENT 1
NOTIFICATION NO.2081-2010-007-01

STATE OF CALIFORNIA DEPARTMENT OF FISH AND GAME, INCIDENTAL TAKE PERMIT NO. 2081-2010-
007-01, ATTACHMENT # 1 (REVISED MARCH 10, 2014)

ADDITIONAL INFORMATION

WEED MANAGEMENT HANDOUTS:

- CALTRANS APPROVAL LIST FOR CHEMICALS
- CALTRANS APPROVAL LIST FOR ADJUVANT
- FORM: REPORT OF CHEMICAL SPRAY OPERATIONS
- HERBICIDE USE PLAN
- WILLITS BYPASS-INVASIVE PLANT SPECIES MASTER LIST FOR MITIGATION LANDS

2013 BIRD NESTING ACTIVITIES IN LITTLE LAKE VALLEY GRAPH

OPTIONAL DISPOSAL SITE LOCATION MAP (MGS PLASMA)

WILLITS BYPASS MITIGATION AND MONITORING PROPOSAL, JANUARY 2012

MATERIALS INFORMATION

AERIALY DEPOSITED LEAD SITE INVESTIGATION REPORT, GEOCON PROJECT No. S9300-06-93,
January 201

STATE OF CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE ,
AMENDMENT AND EXTEND LAKE OR STREAMBED ALTERATION
AGREEMENT, MARCH 10, 2014

AGREEMENT NO. 1600-2010-0044R1



Memorandum

Date: March 10, 2014

To: Mr. John Webb
703 B Street
Marysville, California 95901

From: Mr. Neil Manji 
Northern Region Regional Manager
California Department of Fish and Wildlife
601 Locust Street
Redding, California 96001

Subject: Amendment of Lake or Streambed Alteration Agreement (Agreement)
No. 1600-2010-0044-R1, Willits Bypass Project, Mendocino County

The California Department of Fish and Wildlife (CDFW) received your request to amend and extend Lake or Streambed Alteration Agreement 1600-2010-0044-R1 (Agreement) and the required fees in the amount of \$168.00 for a minor amendment and \$224.00 for an extension. Your request includes project modifications and new mitigation actions proposed since the issuance of the Agreement on June 29, 2010, a request for a time extension to update and submit deliverables, and a request to extend the agreement. Specific project changes since the issuance of the Agreement include:

1. Modifications to the Bypass Design:

- Reducing the median width from 45 feet to 22 feet from south of East Hill Road to the northern end of the project to reduce project impacts on sensitive biological resources by about 12 acres.
- Removing the additional fills and drainage facilities for the Phase 2 project that were initially included during Phase 1 of the project.

2. New mitigation actions:

- Addition of repair of three bank erosion sites along Outlet Creek.
- Addition of approximately 24 acres of wetland establishment adjacent to Outlet and Davis Creeks ("Group 2 wetlands").
- Application of rotational grazing management prescriptions on selected offsite mitigation parcels.
- Implement Fish Passage Project on North Fork Ryan Creek.

CDFW hereby agrees to amend the Agreement to include the modifications and mitigation actions above, in addition to revisions in the project schedule, revisions in acreages that reflect changes made to avoid overlaps and duplicative mitigation credits, and revisions due to changes in mitigation category use and definitions, as follows:

1. CDFW hereby agrees to extend the term of the Agreement to **June 29, 2020**.
2. Revisions to conditions and measures for fish and wildlife resource protection in Agreement No. 1600-2010-0044-R1 follow. This Amendment consists of the original Agreement language as modified with text insertions in ***bold and italics*** and deletions in ~~strike-out~~.

PROJECT LOCATION

The Willits Bypass Project (hereafter, the Project) is located near the City of Willits in Little Lake Valley, Mendocino County, California. The Project will construct a new freeway alignment to the east of Willits. The southern end of the new alignment is located at Post Mile (PM) R43.1 approximately 2.0 miles south of Willits, 39.371887, -123.321514. The northern end of the Project is located at PM R49.0, approximately 1.9 miles south of Reynolds Highway, 39.437511, -123.356766. The Project site is bounded by the City of Willits to the west and the Little Lake Valley to the east, on the Laughlin Range and Willits US Geological Survey (USGS) 7.5 minute quadrangles, Humboldt Base and Meridian.

PROJECT DESCRIPTION

The Project consists of a four-lane freeway bypass crossing the Little Lake Valley east of the City of Willits. The facility will maintain a minimum design speed of 68 miles per hour and will feature a 45.3-foot median separating the northbound and southbound lanes. Each lane will be 12 feet wide. The inside shoulder width (nearest the median) will be 5 feet, while the outside shoulder width will be 10 feet. The Project will begin approximately 2.0 miles south of Willits, where the existing four-lane freeway becomes a two-lane highway, and will continue north, rejoining the existing two-lane highway about 1.3 miles north of the Willits city limits. The overall length of the bypass will be approximately 5.8 miles, starting near PM R43.1 and ending near R49.0.

The bypass alignment will diverge from existing U.S. 101 at the new Haehl Creek interchange and continue northwesterly on an embankment constructed with excess fill from a previous freeway project. At the crossing over Center Valley Road, the roadway embankment will be replaced by a floodway viaduct, approximately 6,000 feet long. The viaduct structure will span the regulatory floodway, roughly paralleling the east bank of Baechtel Creek until it crosses the creek at the confluence with Broaddus Creek east of the Willits Waste Water Treatment Plant (WWTP). The bypass will continue on viaduct as it curves to the west and crosses Mill Creek. From a point approximately 600 feet west of the Mill Creek crossing, the facility will continue northwest on fill, bridging

the Northwestern Pacific Railway (NWPRR) right-of-way before rejoining the existing alignment of U.S. 101 at the new Quail Meadows interchange.

Funding constraints require that the Project be constructed in two phases. Phase 1 consists of the two interchanges and the two southbound lanes which will be operated as a two-lane bypass (one lane in each direction). Construction of Phase 1 is expected to take four years to complete. As funding allows in Phase 1, Caltrans intends to construct as much of the four-lane embankment as possible to help facilitate the construction of Phase 2. The environmental study limits encompass the full four-lane facility and right-of-way purchased in Phase 1 will satisfy the requirements of the ultimate, four-lane, access-controlled freeway. Although only Phase 1 will be constructed at this time, Caltrans will implement mitigation for the biological resource impacts of the full four-lane facility. Funding for the second phase has not yet been identified. The additional funding necessary to construct Phase 2 will likely come from a combination of federal, state and local sources.

Construction of the Project will require excavation and placement of up to 1.4 million cubic yards of fill material for roadway embankment; removal of native wetland, riparian and upland vegetation; construction of temporary access roads and haul roads; construction of temporary and permanent stream crossings; removal of existing culverts on Haehl and Upp Creeks that currently impede the passage of anadromous salmonids; reconstructing the longitudinal profile of these stream reaches to provide improved fish passage; installing rock slope protection (RSP) and/or other bank stabilization measures to protect structures; dewatering of work areas in wetlands and within stream channels for construction of permanent bridge and viaduct piers; installation of sheet piles, temporary H piles, and permanent un-filled pipe piles using vibratory and percussive hammers; and installation of wick drains to provide a stable foundation for embankment fills. In addition to erosion control and revegetation of temporary disturbance areas within the right-of-way, the Project also includes compensatory restoration, enhancement, and preservation activities on a minimum of 4,940 **1795** acres of off-site mitigation lands. An optional proposed borrow site at Oil Well Hill, located on the east side of U.S. 101 approximately 0.85-mile north of the intersection of Reynolds Highway and U.S. 101 has been designated as a source of fill material for the Project.

All work shall be in accordance with submitted plans and diagrams and any subsequent revisions approved by the **DFG CDFW** in writing. Specific work includes:

Interchanges

Two interchanges will be constructed for the project. The Haehl Creek interchange will be located at the south end of the project near Haehl Creek and connect the existing highway into Willits with the new facility. The Quail Meadows interchange will be located near the north end of Little Lake Valley and connect the new facility to the existing highway north of Willits. Interchange ramps will be single-lane.

Bridges and Structures

The bypass will cross creeks, riparian corridors, streets, and railroad rights-of-way using ~~22~~ **21** bridges. Three retaining walls will be built. The following structures will be constructed with this project:

Six bridges in the Haehl Creek interchange area, one for each of the following:

- Northbound freeway lanes separation over State Route (SR) 20
- Southbound freeway lanes separation over SR 20
- Southbound off-ramp over Haehl Creek
- Northbound on-ramp over Haehl Creek
- Northbound freeway lanes over Haehl Creek
- Southbound freeway lanes over Haehl Creek

Two retaining walls in the Haehl Creek interchange area adjacent to Haehl Creek:

1) East side of northbound lanes and 2) West side of northbound on-ramp

Two bridges to cross East Hill Road, including 1) one bridge for the southbound roadway lanes (Phase 1) and 2) one bridge for the northbound roadway lanes (Phase 2)

Two bridges to cross the middle reach of Haehl Creek south of Shell Lane, including one bridge for the southbound roadway lanes (Phase 1) and one bridge for the northbound roadway lanes (Phase 2).

One retaining wall on the west side of the southbound roadway lanes just south of Center Valley Road.

Two viaduct structures to span the floodway:

- Southbound (Phase 1)
- Northbound (Phase 2)

Two bridges to cross over the NWPRR tracks in the Quail Meadows interchange area, including one for the southbound roadway lanes (Phase 1) and one for the northbound roadway lanes (Phase 2).

Two bridges to cross the new connector road to existing U.S. 101 in the Quail Meadows interchange area, including one for the southbound roadway lanes (Phase 1) and one for the northbound roadway lanes (Phase 2).

~~Six~~ **Five** bridges to cross Upp Creek directly north of the Quail Meadows interchange, one for each of the following:

- Southbound roadway lanes (Phase 1)
- Northbound roadway lanes (Phase 2)
- Northbound on-ramp (Phase 1)

- ~~Northbound on-ramp (Phase 2)~~
- Southbound off-ramp
- Roundabout local intersection

~~Note that the northbound on-ramp bridge constructed in Phase 1 would be replaced in Phase 2 by a different bridge.~~

Viaduct

Because the proposed alignment encroaches upon the 100-year floodplain, the design includes two elevated structures, which make up the floodway viaduct. The purpose of this design feature is to span the floodway. The final floodplain evaluation report concludes that project will not increase the base flood elevation of the floodway, and does not constitute a significant floodplain encroachment as defined in 23 CFR 650.105(q).

The viaducts will be located in the central part of the project area and will span Center Valley Road, the lower reach of Haehl Creek just upstream of the confluence with Baechtel Creek, Hearst-Willits Road, Baechtel and Broaddus Creeks at their confluence (beginning of the Outlet Creek designation), the WWTP, and Mill Creek.

The approximately 6,000-foot-long structures will consist of a separate northbound and southbound elevated viaduct superstructure. The total area of both viaducts would be 11.6 acres. Each of the viaducts will be approximately 42.6 feet wide. The edge-to-edge distance between the structures will be approximately 31.2 feet, and each will have a 16.5-foot minimum clearance underneath. The viaducts will require supporting columns, ranging in size from 4.5 to 7 feet in diameter.

Reinforced Concrete Box Culverts

Two large reinforced concrete box (RCB) culverts will be built under Center Valley Road, near Shuster's Trucking to prevent floodplain impacts due to roadway embankment south of Center Valley Road. These two culverts will use turf reinforcement mats in lieu of rock slope protection (RSP) at the inlets and outlets where feasible.

Retaining Walls

Three concrete retaining walls will be constructed: two at the Haehl Creek interchange, and one just before the south end of the viaduct near Baechtel Creek. One Haehl Creek interchange wall will be located along the west side of the northbound on-ramp; the other will be located along the east side of the northbound lanes between the separation structure over SR 20 and the Haehl Creek bridge. The Baechtel Creek retaining wall will prevent floodplain elevation increases.

Excavation (Cut), Embankment (Fill), and Imported Borrow

The estimated embankment requirement for Phase 1 of the proposed project is approximately 1.4 million cubic yards. Because all soil excavated on-site will be reused as embankment, no disposal sites will be required for the project. Beginning just north of the Haehl Creek interchange to the south abutment of the viaduct, and from the north abutment of the viaduct to the terminus of the project, the alignment will be constructed largely on embankment created using excavated soil and imported fill material. Cut slopes will generally vary between a 1:2 (vertical: horizontal) and 1:2.5 ratio. Fill slopes will vary between a 1:2 and 1:4 ratio. The plans call for slope rounding at appropriate locations.

The bypass will require imported borrow material from outside the project area in addition to material excavated on-site. The construction contractor will have the option to determine whether the source of material for earthwork fill will be the Caltrans-designated borrow site at Oil Well Hill, a commercial borrow site, or another site.

An optional borrow site has been designated at Oil Well Hill, just north of Little Lake Valley, as a source of material that the contractor may use for the project. The material in this area is good-quality and suitable for use in embankment construction. The right-of-way for U.S. 101 at the designated borrow site is sufficient to provide the necessary embankment material for earthwork. Potential excavation at the proposed designated borrow site at Oil Well Hill could result in the removal of up to 1.4 million cubic yards of material. The State Geology and Mining Board granted an exception to the Surface Mining and Reclamation Act (SMARA) permitting requirement on March 13, 2008. The contractor may also choose to use available commercial borrow sites in the vicinity to obtain the required fill. Typically, commercial borrow sites hold pre-approved operating permits and do not require any additional environmental permitting when soil is exported. Should the contractor select an alternative, non-commercial borrow site for this project, the contractor will be responsible for conducting a separate environmental review for the site.

Fish Passage

One existing culvert in the upper Haehl Creek channel, located under the proposed highway bridge 10-0129R/L, will be permanently removed and restored as a natural drainage feature. Fish passage on a second existing culvert in upper Haehl Creek will be improved by stabilizing the stream gradient to allow a backwater pool to extend throughout the length of the culvert. An existing RCB culvert in the vicinity of the proposed Quail Meadows interchange and passing under US 101 will be permanently removed and the creek contoured, re-graded, stabilized, and replanted; local traffic will cross Upp Creek on the new bridge that will be on the north leg of the roundabout.

Stabilization of both creek channels that pass through the interchange areas (Haehl and Upp Creeks) will consist of grade control structures located downstream of the culvert,

at appropriate heights and intervals, for the distance necessary to stabilize the natural stream gradient. Fish passage design elements will comply with guidelines established by National Marine Fisheries Service (NMFS) and California Department of Fish and Game (DFG CDFW).

An existing culvert under the access road to the Schmidbauer Ranch will be improved. This access road will be from the east side of the southern interchange. The existing culvert in upper Haehl Creek will be backwatered by building grade control structures downstream to restore and stabilize the natural stream gradient. Stabilizing the natural stream gradient will allow the bottom of the stream bed to aggrade to the culvert elevation. Construction of grade control structures will occur during summer when this reach of Haehl Creek is normally dry. If water is present, a qualified fisheries biologist will survey the pool for the presence of salmonids. If present, the fish will be removed and relocated before removal and replacement of the culvert.

Landscaping

Disturbed upland areas such as the cut and fill slopes adjacent to the roadway and along interchange ramps, as well as the median between the inside roadway shoulders, will be revegetated with native plants sourced from the following locations, in priority order: Little Lake Valley, Outlet Creek watershed, Eel River watershed. For drivers' safety and in compliance with Caltrans design standards, no trees will be planted within the clear recovery zone where errant vehicles could hit them. Only soft shrubby and herbaceous native species may be planted throughout these areas to prevent abrupt slowing, redirection, or launching of stray vehicles. Temporarily impacted areas will be revegetated to their pre-construction plant community type. They will be seeded and planted with native plants sourced from the following locations, in priority order: Little Lake Valley, Outlet Creek watershed, Eel River watershed.

Stream Bank Stabilization

To prevent bank erosion and damage to the bypass facilities, RSP and other bank stabilization treatments will be required along short lengths of creek banks. The use of RSP will be minimized through the substitution of "Rolled Erosion Control Product" (RECP; netting) or "Turf reinforcement Mat" (TRM) in appropriate locations.

At locations where Haehl and Upp Creeks pass through the right-of-way, the stream channel will be contoured, re-graded, and designed for fish passage following the guidelines set forth by NMFS and DFG CDFW.

Mitigation Construction

Bypass construction will result in temporary and permanent impacts on riparian and wetland habitat and permanent impacts on other waters and oak habitat. Temporary impacts on riparian and wetland habitat will be mitigated on site through the use of

restoration techniques. Permanent impacts on riparian and wetland habitat will be mitigated off site through the use of creation, enhancement, and/or preservation techniques.

On site mitigation implementation will focus primarily on restoring temporarily affected riparian and wetland habitat within the bypass project footprint. In addition, on site minimization efforts related to state-listed plant species (e.g., seed collection, and topsoil harvesting and stockpiling) will be required. On site mitigation actions with the potential to result in impacts on wetlands, other waters, riparian habitat, listed plant species and/or listed fish will entail the following activities, and are summarized below (a full description of proposed mitigation actions is presented in the Final MMP):

- Site Preparation. Site preparation of on site mitigation sites will entail vegetation clearing and seed, rhizome, and topsoil salvaging. Vegetation clearing will be conducted within the bypass project footprint and will entail the use of heavy equipment to strip the existing vegetation. Prior to the beginning of ground-disturbing project construction activities, known populations of listed plant species to be affected by construction either will be salvaged for transportation to adjacent on site locations or salvaged for relocation to offsite mitigation parcels, where the harvested material will be used to topdress created wetlands.
- Grading. Temporarily affected locations will be graded as necessary to reestablish appropriate topography and site drainage. The disturbed locations will be configured to replicated preproject conditions as closely as possible. Grading will be limited to the dry season (late spring through early fall). Erosion control seed mixes will be applied after grading is complete but prior to the onset of wet season rains to prevent loosened material/sediment from entering wetlands or waters near the bypass project footprint.
- Seeding. Temporarily affected riparian and wetland locations will be seeded with an erosion control mix or a wetland seed mix, depending on location in the bypass project footprint. The seed will be from locally collected seed or plants (i.e., sourced from the following locations, in priority order: Little Lake Valley, Outlet Creek watershed, Eel River watershed). All temporarily affected riparian locations and wetland locations outside the viaduct construction area will be seeded with an erosion control mix. Temporarily affected wetlands in the viaduct construction area will be seeded with a wet meadow seed mix.
- Planting. Temporarily affected riparian and wetland locations in the viaduct construction area will be restored using container stock grown from locally collected seed or cuttings (i.e., sourced from the following locations, in priority order: Little Lake Valley, Outlet Creek watershed, Eel River watershed). Container plants will be placed in a planting hole that will be hand excavated or augured.

Mitigation on individual offsite mitigation parcels may include a combination of habitat restoration, creation, enhancement, and/or preservation. Off site mitigation actions with the potential to result in impacts on wetlands, other waters, riparian habitat, listed plant species and/or listed fish will entail similar ground-disturbing activities (e.g., site preparation, grading, seeding, and planting) as those described above for on site mitigation areas, **and other disturbance from maintenance of mitigation lands including instream sediment and debris removal, vegetation management, and bank stabilization and erosion control activities.** In addition, grazing management plans will be developed for each of the off site mitigation parcels. The plans will include strategies to promote the establishment and preservation of target wetland communities and associated plant species and to support and potentially increase the extent of currently occurring listed plant species. Enhancement actions for each parcel may include repairing and replacing existing fences and gates to control livestock; developing and implementing rotational grazing strategies to promote the establishment and preservation of target listed plant species and wetland communities; installing permanent and/or temporary exclusion fencing around sensitive areas; installing water troughs in each grazing management unit to spread grazing across the entire unit; and locating salt licks away from drainages and areas to be protected.

PROJECT IMPACTS

Existing fish or wildlife resources the project could substantially adversely affect include: white-tailed kite (*Elanus leucurus*), Cooper's hawk (*Accipiter cooperii*), Red-shouldered hawk (*Buteo lineatus*), and other raptors; Southern Oregon-Northern California Coasts (SONCC) coho salmon (*Oncorhynchus kisutch*), California coastal Chinook salmon (*Oncorhynchus tshawytscha*), northern California steelhead (*O. mykiss irideus*); yellow warbler (*Dendroica petechia brewsteri*), yellow-breasted chat (*Icteria virens*), and other riparian-dependent bird species; special-status plants including Baker's meadow-foam (*Limnanthes bakeri*) and North Coast semaphore grass (*Pleuropogon hooverianus*), as well as other non-game and game fishes, amphibians, reptiles, aquatic invertebrates, mammals, birds, and other aquatic and riparian species.

The adverse effects the project could have on the fish or wildlife resources identified above include: disruption of raptor nesting behavior and decreased reproductive success due to construction disturbance; loss of occupied passerine habitat and nests, including eggs and/or nestlings, as a result of vegetation removal; direct mortality of fish, amphibians, and other aquatic species during pile driving and construction dewatering activities; temporary and permanent impacts to aquatic species due to suspended sediment and the smothering and/or shading of egg masses and benthic invertebrate communities due to sediment deposition; direct removal of special-status plants and occupied habitat as a result of construction activities.

Implementation of the Project, including wetland creation and other mitigation activities, will result in the following permanent and temporary impacts on riparian corridors, oak woodlands, jurisdictional wetlands, and special-status plant habitats:

Table 1. Temporary and permanent resource impacts from project and mitigation activities after removal of overlaps^{1,2}.

Resource	Temporary Impacts (acres)	Permanent Impacts (acres)	Total Impacts (acres)
North Coast semaphore grass	0.02 0.08	0.39 0.22	0.41 0.30
Baker's meadowfoam	36.74 17.80	33.51 103.19	70.25 120.99
Category I Riparian Corridor ³	8.15 4.67	2.38 4.80	10.53 9.47
Jurisdictional Wetlands	12.58 29.84	26.07 25.46	38.65 55.30
Other Waters	2.04 2.08	2.03 2.31	4.07 4.39
Category II Riparian Corridor ⁴	0.03 0.02	3.56 3.38	3.59 3.40
Category III Riparian Corridor ⁵	0.34 0.58	0.93 2.61	1.24 3.19
Oak Woodland (tree canopy)			
Lowland	0.08 0.00	5.70 4.75	5.78 4.75
Upland	0.00	5.02 7.71	5.02 7.71
Oak Woodland (grassland)			
Lowland	2.34 8.83	26.26 31.75	28.60 40.58
Upland	0.00	7.83 12.52	7.83 12.52
Total:	62.29 63.90	113.68 198.70	175.97 262.60

¹ Where resources occur together as components of the same habitat (e.g., Baker's meadowfoam in wetlands or oak woodland in protected fisheries habitat (Category I Riparian habitat), the overlap was removed to avoid duplicating mitigation credits. I.e., in any location mitigation credit can only be given to one resource.

² Caltrans has proposed a mitigation package that addresses, in an integrated approach, resources that are the subject of various and sometimes different environmental laws. Thus, some of the resource impacts (e.g., mitigation impacts on upland oak woodland [tree canopy]), may not fall within CDFW's jurisdiction pursuant to Fish and Game Code 1600 et seq. Rather than omit integral aspects of Caltrans' mitigation package, this Agreement identifies such impacts and mitigation but is not relying upon that mitigation for purposes of Agreement compliance.

³ Category I Riparian Corridors *are those* adjacent to salmonid streams.

⁴ Category II Riparian Corridors *are those* on tributaries to salmonid streams within 1,000 feet of the confluence with a Category I stream.

⁵ Category III Riparian Corridors *are those* that are more than 1,000 feet upstream from the confluence with a Category I stream.

MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

1. Administrative Measures

Permittee shall meet each administrative requirement described below.

- 1.1 Documentation at Project Site. Permittee shall make the Agreement, any extensions and amendments to the Agreement, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily available at the project site at all times and shall be presented to **DFGCDFW** personnel, or personnel from another state, federal, or local agency upon request.
- 1.2 Providing Agreement to Persons at Project Site. Permittee shall provide copies of the Agreement and any extensions and amendments to the Agreement to all persons who will be working on the project at the project site on behalf of Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors.
- 1.3 Notification of Conflicting Provisions. Permittee shall notify **DFGCDFW** if Permittee determines or learns that a provision in the Agreement might conflict with a provision imposed on the project by another local, state, or federal agency. In that event, **DFGCDFW** shall contact Permittee to resolve any conflict.
- 1.4 Project Site Entry. Permittee agrees that **DFGCDFW** personnel may enter the project site at any time after notifying the Caltrans Resident Engineer to verify compliance with the Agreement.
- 1.5 Conduct Activities as Described in Notification. Permittee's notification, *i.e., the* (Notification of Lake or Streambed Alteration **form** together with all maps, plans, photographs, drawings, and all other supporting documents submitted with **the** notification **form** to describe the activity), **including the Final Environmental Impact Report (EIR; SCH Number 1990030006) certified by the Permittee as lead agency for the Project under CEQA on December 15, 2006, and the Supplemental EIR certified by the Permittee on May 19, 2010, are** is hereby incorporated by reference into this Agreement. **The** Permittee shall conduct project activities within the work areas and using the mitigative features described in the notification and supporting documents, unless such project activities, work areas or mitigative features are modified by the provisions of this Agreement, in which case the activities shall be conducted as described in this Agreement.

2. Avoidance and Minimization Measures

To avoid or minimize adverse impacts to fish and wildlife resources identified above, Permittee shall implement each measure listed below.

2.1 ***Except for removal of above-ground portions of vegetation***, All work within the channel or on the stream banks shall be confined to the period commencing June 15 and ending October 15, provided the stream is dry or at minimum flow. If weather conditions permit and the stream is dry or ***discontinuous, and/or advance written approval is obtained from CDFW***, at minimum flow, the Permittee may perform work within the stream channel or on the banks outside of the above referenced work window, provided a written request is made to ~~DFG~~**CDFW** at least five (5) days before the proposed work. ~~period variance~~. Written approval from ~~DFG~~**CDFW** for the proposed work ~~period variance~~ must be received by the Permittee prior to the start or the continuation of work outside of the above-referenced work window.

2.2 If work is ***For any work*** performed within the stream channel, or on the banks, ***or within 50 feet of top of banks*** outside of the above referenced ***June 15 – October 15*** work window, the Permittee shall do all of the following:

a. ***Prior to any work at a site***, sStage erosion and sediment control materials at the work site.

b. Treat for erosion control immediately upon completion of work at the site, and prior to the onset of precipitation, all bare mineral soil exposed with encroachment work, except for the channel bed. Employ effective erosion control measures on stream banks and within 50 feet of top of banks where needed prior to and during work to prevent soil and debris from entering the water during or after project activities.

c. Monitor the ~~seventy-two (72) hour forecast~~ from the National Weather Service (NWS) ***weather forecast in Willits:***

(1)e. When the 72-hour forecast ***NWS weather forecast at <http://www.weather.gov>*** indicates a probability of precipitation of 60% or greater, ***in Willits, and prior to*** ~~or at the onset of any precipitation~~, ground disturbing activities shall cease and erosion control measures shall be implemented to stabilize exposed soils and prevent the mobilization of sediment into the stream channel or adjacent wetland or riparian areas.

(2). ***When the 7-day NWS weather forecast for Willits at <http://www.weather.gov> includes a minimum of 5 consecutive days⁶ with any chance of precipitation, 3 consecutive days with a 30% or greater chance of precipitation, or 2 consecutive days of 50% or greater chance of precipitation, the Permittee shall finish work underway within stream channels, on banks and within 50 feet of top of banks, immediately deploy***

⁶ * a "day" is a 24-hour period that includes the night forecast

erosion control materials, and refrain from starting any new work prior to the rain event.

(3). When a 15-day National weather forecast for the Willits area at http://www.emc.ncep.noaa.gov/gmb/yzhu/html_pgpf/pgpf_us1.html shows a 50% or greater chance of > 0.5-inch of rainfall in a 12-hour period, the Permittee shall finish work underway and apply erosion control prior to the onset of precipitation.

d. To the maximum extent feasible, isolate all hydrologically-connected road segments at encroachments concurrent with work.

e. Cease use of roads and crossings when precipitation is sufficient to generate overland flow off the road surface, or when use of the road or crossing is causing rutting of the road surface. Road and crossing use shall not resume until the road bed is dry, defined as a road surface which is no wetter than that found during normal dust abatement watering treatments, and is not rutting or pumping fines or causing a visible turbidity increase in the stream or water sources leading to the stream.

- 2.3 ~~Notwithstanding Condition 2.1 above,~~ Removal of the above-ground portions of existing ***riparian*** trees and shrubs shall occur after August 31 and before February 1 to avoid impacts to nesting birds. If vegetation must be removed during the nesting season (February 1 to August 31) nest surveys shall be conducted prior to vegetation clearing.
- 2.4 The Permittee shall instruct all persons who will be completing any ground-disturbing activity at a work site to comply with the conditions set forth in this Agreement and shall inspect each work site before, during, and after completion of any ground-disturbing activity at the work site.
- 2.5 Permittee shall conduct an education program for all persons employed or otherwise working on the Project site prior to performing any work on-site. The program shall consist of a presentation that includes a discussion of the sensitive resources existing within and adjacent to the work area, including State and federally listed species, as well as the protective measures required in this Agreement and the Incidental Take Permit for the Project. Interpretation shall be provided for non-English speaking workers, and the same instruction shall be provided for any new workers prior to their performing work on-site. Permittee shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry on-site. Upon completion of the program, employees shall sign a form stating they attended the program and understand all protection measures. These forms shall be filed at the worksite offices and be available to ~~DEG~~**CDFW** upon request.

- 2.6 ~~At least 30 days before initiating channel-, ground- or vegetation-disturbing activities,~~ **Prior to conducting any instream work,** Permittee shall submit **for approval** to ~~DEGCDFW~~ in writing the name, qualifications, business address, and contact information for ~~a biological monitors (Designated Biologists).~~ The Designated Biologists shall be knowledgeable and experienced in the biology and natural history of the Project area, with special emphasis on special-status species and sensitive habitats. ~~The Designated Biologists shall be responsible for~~ **conducting fish and wildlife surveys and monitoring, and** monitoring of Project activities and/or channel-, ground- or vegetation-disturbing activities within habitats for special-status species and other sensitive areas. ~~Permittee shall obtain DEGCDFW approval of the Designated Biologist prior to the commencement of Project-related activities that may result in disturbance to special-status species or sensitive habitats.~~
- 2.7 ~~The A~~ Designated Biologist shall be on-site daily while Project activities including all pile installation, dewatering, channel-, vegetation- or ground-disturbing activities that may affect special-status species are taking place to: (1) minimize incidental take of special-status species; (2) check for compliance with all mitigation and avoidance measures; (3) check all exclusion zones; and (4) ensure that signs, stakes, and fencing are intact, and that human activities are restricted outside of these protective zones. ~~The Designated Representative or~~ Designated Biologist shall prepare daily written observation and inspection records summarizing: **disturbance activities observed,** oversight activities and compliance inspections, observations of **fish and wildlife resources including** special-status species, survey results, and monitoring activities required by this Agreement. **The daily written observation and inspection report summaries shall be submitted to CDFW in electronic format in a timely manner and at least on a weekly basis while Project activities are taking place.** The Designated Biologists shall conduct compliance inspections a minimum of once per month during periods of inactivity and after clearing, grubbing, and grading are completed. **During periods of inactivity, compliance inspection report summaries shall be submitted to CDFW within one week of completing inspections.**

HABITAT AND SPECIES PROTECTION

- 2.8 ~~To avoid disturbance to nesting white-tailed kites and other raptors, a qualified biologist shall conduct pre-construction field surveys during the courtship period (February) to identify nesting territories within ¼ mile of the Project alignment. If active nests are identified within ¼ mile of the alignment, a no-construction buffer will be established around the nest until the young have successfully fledged. No take of white-tailed kites or other raptors, including their nests, eggs, or young is authorized by this Agreement.~~

- 2.8 This Agreement does not authorize the take of any State or federal threatened or endangered species, **fully fully-protected birds, mammals, reptiles, amphibians and fish, migratory non-game birds and nests, or any other act that is prohibited by Fish and Game Code**. Any take of listed threatened or endangered species that is incidental to Project activities shall be in full compliance with the terms and conditions of the Incidental Take Permit issued by **DFGCDFW** for the Project (ITP #2081-2010-007-01) and the federal Biological Opinion and Incidental Take Statement issued by National Marine Fisheries Service (NMFS) for the Project (BO #2010/01124:DW).
- 2.9 Prior to ~~initiating channel-vegetation or ground-disturbing~~ Project **construction** activities, Permittee shall clearly delineate right-of-way and/or property boundaries of the Project site with fencing, stakes or flags and shall similarly delineate the limits of Project activities. Permittee shall restrict all project activities to within the fenced, staked or flagged Project boundaries. Permittee shall maintain all fencing, stakes and flags until the completion of Project activities.
- 2.10 Wetlands, riparian areas, oak woodlands, and habitat for Baker's meadowfoam and North Coast semaphore grass within the Project limits but outside the work area shall be designated as Environmentally Sensitive Areas (ESAs) and shall be off limits to construction equipment and personnel.
- 2.11 ESA fencing shall consist of ~~temporary orange construction fence or other~~ highly visible **fencing** materials that clearly delineates the limits of the work area. ~~Environmentally Sensitive Areas~~ **ESAs** shall be clearly shown on the Project plans and drawings. The Permittee shall ensure that the contractor, subcontractors, and all personnel working on the Project are instructed on the purpose of the ESA fencing and understand the limits of the work area. ESA fencing **and Best Management Practices (BMPs) such as silt fence** shall be installed prior to the beginning of **project construction activities**. ~~channel-ground-or-vegetation-disturbing activities~~. The placement of ESA fencing shall be inspected and approved by **DFGCDFW** prior to the initiation of *project construction work in that location*.
- 2.12 Disturbance or removal of riparian and wetland vegetation shall not exceed the minimum necessary to complete operations. Where feasible, hand tools (chain saws, etc.) shall be used to trim woody riparian vegetation to the extent necessary to gain access to work sites. Whenever possible, root systems shall be left intact to facilitate more rapid recovery following temporary construction impacts.
- 2.13 Except where provided for within this agreement, the removal of riparian vegetation from the streambed or streambanks is prohibited without prior written approval from **DFGCDFW**. The work area shall be identified to all workers, as represented in plans.

- 2.14 *Annually following the winter period throughout the life of this Agreement, and no later than August 15 of each year, the Permittee shall inspect all Category I stream corridors and document all in-channel and bank maintenance work needed (e.g., sediment, debris and vegetation removal needs; bank stabilization and erosion control). No later than September 15 of each year, Permittee shall submit one or more reports to CDFW for review and written approval of proposed in-stream work and bank maintenance activities prior to conducting any of the maintenance work identified.***

CULVERTS AND INSTREAM STRUCTURES

- 2.15 ~~All work within the channel or on the banks shall be performed when the channel is dry or at minimum flow.~~ If water is present during construction, all work shall be performed in isolation from surface or subsurface flow.
- 2.16 Where water is present, a temporary stream diversion shall be constructed to isolate the work area from flow. Temporary diversions may be constructed using gravel berms, clean washed spawning gravels, sand bags, K-rail, plastic sheeting, or a combination of these materials upstream from the work area. Flows will then be diverted into a temporary culvert, pipe, or conduit and released downstream from the work area.
- 2.17 Dewatering shall be done in a manner that prevents the discharge of material that could be deleterious to fish, plants or other aquatic life and maintains adequate flows to downstream reaches during all times natural flow would have supported aquatic life.
- 2.18 Any turbid water pumped from the work area shall be used for construction purposes (compaction, dust abatement, etc.) or properly disposed of in an upland area where it will not drain to surface waters or wetlands.
- 2.19 If clean washed spawning gravel (0.5" – 4") is used for diversion berms, it may be left in the channel following construction provided it is spread to a depth less than 6 inches and does not impede the movement of fish or redirect stream flows. All other temporary diversion materials shall be removed from the stream channel upon completion of work.
- 2.20 Temporary bridges, culverts, or other structures that will remain in the channel after October 15 shall be designed to pass the 100-year flood event. Structures and materials not designed to withstand high flows shall be removed from the floodplain prior to October 15.
- 2.21 Installation of permanent culverts, bridges, grade control structures, instream habitat enhancement features, and other permanent channel modifications shall not impede the passage of fish up or down stream. ***Excepting the U.S. Route***

101 Ryan Creek crossings, Permittee shall submit detailed designs for work within the stream channels to **DFG CDFW** for review and approval **at least 60 days prior to proposed work.** ~~no later than August 1, 2010.~~

- 2.22 Drafting of water from surface watercourses is not authorized by this Agreement. Water for construction purposes shall be obtained from commercial municipal, industrial or groundwater sources.

INSTALLATION OF TEMPORARY AND PERMANENT PILES

- 2.23 All pile driving activities, including installation of sheet piles, temporary and permanent piles located within the channel or below the top of bank, shall be confined to the period June 15 through October 15. Installation of permanent bridge or viaduct piles within 50 feet of the channel shall be confined to the period June 15 through October 15. Depending on the results of hydroacoustic monitoring, the Permittee may install permanent bridge or viaduct piles within 50 feet of the channel outside this work window, provided a written request is made to **DFG CDFW**. Written approval from **DFG CDFW** for the work period variance must be received by the Permittee prior to the start or continuation of work outside the June 15 – October 15 work window.

- 2.24 Permanent pile driving activities within the stream channel shall be contained within coffer dams. A bubble curtain or other approved attenuation measure will be used to reduce sound exposure levels.

- 2.25 If surface water is present within the channel, Permittee shall conduct hydroacoustic monitoring to document peak sound pressure levels and cumulative sound exposure levels during all permanent pile driving activities in the channel or within 50 feet of the channel. Driving of temporary trestle and falsework piles below the top of bank shall also be monitored. If underwater sound pressure levels for each pile type and size do not vary to a large degree, the Permittee may request written approval from **DFG CDFW** to discontinue hydroacoustic monitoring. Permittee shall ~~submit a~~ **comply with the revised** Hydroacoustic Monitoring Plan ~~for review and approval by DFG~~ **submitted to CDFW May 14, 2013.** ~~no later than March 15, 2011.~~

- 2.26 Prior to conducting temporary or permanent pile driving activities within the channel, or within 50 feet of the channel, Permittee shall exclude, remove and relocate fish from coffer dams and those portions of the stream where cumulative sound exposure levels ($SEL_{Cumulative}$) are predicted to exceed the interim injury criteria of 183 dB. One or more of the following NMFS-approved methods shall be used to capture coho and other salmonids: dip net, seine, throw net, or electrofishing.

- 2.27 ~~If pile driving activities are expected to exceed interim $SEL_{Cumulative}$ threshold levels for more than two consecutive days, Permittee shall dewater the affected~~

~~stream reach in lieu of using block nets to exclude fish.~~ During dewatering, flows in the affected reach shall be diverted incrementally to facilitate fish capture and relocation. Flows shall be reduced over a minimum 4-hour period in the following increments: 50%, 75%, 90%, and 100%.

2.28 Pumps used to dewater cofferdams, and pipes or conduits used to dewater stream reaches, shall be screened as follows:

a. Perforated plate: screen openings shall not exceed 3/32 inches (2.38 mm) indiameter.

b. Woven wire: screen openings shall not exceed 3/32 inches (2.38 mm) measured diagonally.

c. Screen material shall provide a minimum of 27% open area.

d. Approach velocity shall not exceed 0.33 feet per second.

2.29 Fish relocation activities shall be overseen by the Designated Biologist and shall be conducted by qualified fisheries biologists that are authorized by NMFS and ~~DFG~~**CDFW** to handle listed salmonids. Captured fish will be segregated by size to minimize predation, and maintained in cool, well-oxygenated water until released to suitable habitat outside the construction impact area.

EROSION AND SEDIMENT CONTROL

2.30 The project shall at all time feature adequate erosion and sediment control devices to prevent the degradation of water quality.

2.31 Soils exposed by project operations shall be treated to prevent sediment runoff and transport. Erosion control measures shall include the proper installation and maintenance of approved Best Management Practices (BMPs) and may include applications of seed, certified weed-free straw, compost, fiber, commercial fertilizer, stabilizing emulsion and mulch, or combinations thereof.

2.32 Erosion control measures shall be monitored and maintained during and after each storm event. Modifications, repairs, and improvements to erosion control measures shall be made following each storm event to prevent sediment from entering surface waters or wetlands.

2.33 Soils adjacent to the stream channel that are exposed by project operations shall be adequately stabilized **prior to the onset of precipitation** when rainfall is reasonably expected during construction, and immediately upon completion of construction, to prevent the mobilization of such sediment into the stream channels or adjacent wetlands. ~~National Weather Service forecasts~~ **NWS weather**

forecasts for Willits shall be monitored by the Permittee to determine **the potential for rain events and** the chance of precipitation.

- 2.34 Following construction, all disturbed upland areas shall be stabilized and reseeded with an erosion control mix ~~consisting of regionally~~ **containing regionally** appropriate, native grass and forb species. Temporarily affected wetlands shall be seeded with a wet meadow seed mix **as described in the most recent Mitigation and Monitoring Plan**. Seed will be obtained from the following locations, in priority order: Little Lake Valley, Outlet Creek Basin, or the Eel River watershed.

EQUIPMENT ACCESS

- 2.35 Vehicles shall not be driven, or equipment operated, in water covered portions of a stream, or where wetland vegetation, riparian vegetation, or aquatic organisms may be destroyed, except as otherwise provided for in the Agreement to complete authorized work.
- 2.36 Project-related personnel and equipment shall access the Project site using existing designated routes and shall not cross undisturbed ground outside of or in route to the Project site. Project-related vehicle traffic shall be restricted to established roads, staging, and parking areas. If Permittee determines construction of off-site routes for travel are necessary, Permittee shall contact **DFG CDFW** prior to carrying out such an activity. **DFG CDFW** may require an amendment to this Agreement if additional resource impacts may result from Project modification.

PETROLEUM, CHEMICAL AND OTHER POLLUTANTS

- 2.37 All construction-related materials and equipment shall be stored in designated staging areas located a minimum of 150 feet from streams or other water bodies unless approved in writing by **DFG CDFW**.
- 2.38 Refueling and vehicle maintenance shall be performed at least 150 feet from streams or other water bodies unless approved in writing by **DFG CDFW**.
- 2.39 No equipment or machinery shall be operated within any flowing stream.
- 2.40 Any equipment or vehicles driven and/or operated within or adjacent to the stream channel shall be checked and maintained daily to prevent leaks of materials that, if introduced to water, could be deleterious to aquatic life, wildlife, or riparian habitat.

- 2.41 All equipment used during construction of this Project shall be cleaned (i.e. free of dirt and debris that may harbor noxious weed seeds and plant parts) prior to its arrival on site. ~~and before leaving the Project area.~~
- 2.42 Stationary equipment such as motors, pumps, generators, and welders that contain deleterious materials, located within or adjacent to a stream shall be positioned over drip pans, ***shall be bermed to contain any potential spills, and shall be protected from rain. Berms shall consist of plastic covered dirt or sand bags.***
- 2.43 All activities performed in or near a stream shall have absorbent materials designated for spill containment and clean up activities on-site for use in an accidental spill. The Permittee shall immediately notify the California Emergency Management Agency at 1-800-852-7550 and immediately initiate the clean up activities. ~~DFG~~**CDFW** shall be notified by the Permittee and consulted regarding clean-up procedures.
- 2.44 ***The Permittee shall install the necessary containment structures to control the placement of wet concrete and to prevent it from entering into the channel outside of those structures. The Permittee shall install a secondary containment wall or casing between the primary containment structures (e.g. headwall form) and the active channel to prevent wet concrete from entering into the active channel upon failure or leak of primary structures. No concrete shall be poured within the high flow line if the 15-day weather forecast indicates any chance of rain.***
- 2.45 ***At all times when the Permittee is pouring or working with wet concrete there shall be a designated monitor to inspect the containment structures and ensure that no concrete or other debris enters into the channel outside of those structures.***
- 2.46 No debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete or washings thereof, asphalt, paint or other coating material, oil or petroleum products or other organic or earthen material from any construction, or associated activity of whatever nature shall be allowed to enter into, or placed where it may be washed by rainfall or runoff into, waters of the State. When operations are completed, any excess materials or debris shall be removed from the work area. No rubbish shall be deposited within 150 feet of the high water mark of any stream or lake.

3. Compensatory Measures

To compensate for adverse impacts to fish and wildlife resources identified above that cannot be avoided or minimized, Permittee shall implement each measure listed below.

- 3.1 Prior to initiating channel- ground- or vegetation-disturbing Project activities, and no later than December 31, ~~2012~~ 2010, the Permittee shall ~~acquired and protect a minimum of 1,910 acres~~ **approximately 1795 acres** of Habitat Management Lands (HM Lands) **to compensate for Project impacts.** ~~identified in the Final Mitigation and Monitoring Proposal dated June 8, 2010.~~ On these lands, the Permittee shall **establish (create new), reestablish (bring back to pre-project condition), rehabilitate (enhance existing), preserve, and conserve habitats** ~~create, enhance, restore, and preserve habitats~~ in the following amounts to offset Project impacts:

North Coast semaphore grass. Permittee shall ~~has~~ **acquired**, ~~restore~~, and **shall rehabilitate and** permanently preserve four extant populations of North Coast semaphore grass totaling 5.09 acres on approximately ~~730~~ acres of HM Lands. A restoration and management plan for the HM Lands shall be prepared and submitted to ~~DFG~~ **CDFW** for approval within 18 months after the effective date of this Agreement. The plan shall specify vegetation management actions and enhancement measures designed to result in a net expansion of existing semaphore grass populations on the HM Lands. **In addition, Permittee shall replant for establishment, on 2.97 acres of suitable habitat, North Coast semaphore grass salvaged from the Project impact area.**

Baker's meadowfoam. **Within approximately 1099 acres of potentially suitable habitat, approximately 159 acres of occupied habitat found within approximately 733 acres shall be rehabilitated, and approximately 18 acres of habitat shall be reestablished.** ~~A total of 1,120.34 acres of habitat shall be acquired and preserved, including 120.38 acres of occupied habitat, 999.96 acres of potentially suitable habitat, and 9.62 acres of restored habitat.~~

Category I Riparian Habitat. Compensatory mitigation for riparian habitat impacts on salmonid streams shall focus on **establishment, rehabilitation,** ~~creation,~~ enhancement, and preservation of riparian corridors along Outlet Creek and other salmonid streams. **A total of approximately 131 acres shall be acquired for establishment of approximately 44 acres of new habitat, rehabilitation of approximately 82 acres of habitat, and protection or preservation of approximately 5.5 acres of existing habitat. In addition approximately 4.7 acres of habitat will be reestablished within the Willits Bypass construction footprint.** ~~A total of 147.97 acres shall be acquired, including creation of 47.57 acres of new habitat, enhancement of 48.51 acres of habitat, and protection or preservation of 100.40 acres of existing habitat.~~

Jurisdictional Wetlands and Other Waters. Impacts to jurisdictional wetlands will be mitigated through **establishment of approximately 49.5 acres of new wetlands, rehabilitation of approximately 1,160 acres of existing wetlands, and preservation of approximately 4 acres.** ~~creation of 24.33 acres of new wetlands, enhancement of 1,101.13 acres of existing wetlands, preservation of 53.44 acres, and restoration of 3.70 acres of existing wetlands.~~ **In addition**

approximately 30 acres of existing wetlands will be reestablished. Mitigation for impacts to other jurisdictional waters will include ***rehabilitation of approximately 46 acres*** enhancement of 17.58 acres through planting riparian vegetation and oaks on the banks of existing watercourses, ***through preserving approximately 2 acres of existing habitat, and reestablishment of approximately 2 acres.*** and through protecting 21.99 acres and preserving 2.16 acres of existing habitat.

Category II and III Riparian Habitat. Permanent and temporary impacts to Category II and III riparian corridors shall be mitigated by the ***establishment, rehabilitation,*** creation, enhancement, and preservation of Category I, II, and III Riparian Corridors, with the highest priority being placed on Category I habitats. A total of ***approximately 1.6 acres of new habitat will be established, approximately 7.8 acres rehabilitated, and approximately 0.6 acres reestablished along the Bypass alignment.*** ~~1.76 acres of new habitat will be created, 4.46 acres enhanced, and 15.63 acres protected.~~ In addition, a total of ~~109.15~~ ***approximately 115*** acres of other riparian habitat not associated with a defined watercourse will be ***established, rehabilitated,*** ~~created, enhanced, protected and preserved on the off-site HM Lands.~~

Lowland Oak Woodland. ***A total of approximately 23 acres of new oak woodland will be established, approximately 9 acres of oak woodland grassland will be reestablished, and approximately 199 acres of existing oak woodland grassland will be conserved, i.e., protected by conservation easements but unlike "preservation," allowing mitigation actions such as grazing to occur.*** ~~A total of 22.24 acres of new valley oak woodland will be planted, with an additional 2.31 acres of existing woodland preserved and restored. In addition, 201.03 acres of existing oak woodland grassland will be preserved and restored.~~

Upland Oak Woodland. Permanent impacts to upland oak woodland will be mitigated by preserving a minimum of ~~15.06~~ ***approximately 43*** acres of existing oak canopy and ***approximately 7*** ~~26.71~~ acres of oak woodland grassland at the north end of Little Lake Valley.

- 3.2 ~~Prior to initiating channel vegetation or ground disturbing activities, and no later than December 31, 2010, Permittee shall submit detailed mitigation plans to DFG for review and approval. The plans~~ ***Permittee has submitted for CDFW review and approval a Mitigation and Monitoring Proposal (MMP) that details mitigation measures related to Project impacts. The MMP shall include 1) a detailed description of the baseline condition of each HM Land parcel acquired to offset impacts to the resources identified above, 2) a detailed description of the measures that will be used to restore and enhance the ecological functions of the HM Lands, including final design and planting details for habitat creation, revegetation, and enhancement actions, 3) a discussion of the parameters that will be monitored to determine changes in ecological functions, including the frequency***

of monitoring, methods to be used, and criteria used to determine success, 4) an adaptive management plan to be implemented in the event expected results are not achieved, and 5) a long-term plan for managing and maintaining the HM Lands after success criteria have been met. **Permittee shall provide CDFW with a revised final MMP that meets CDFW's approval prior to reinitiating Bypass construction work activities. CDFW will provide approval for the Final MMP in writing, and the Permittee shall adhere to the Final MMP approved by CDFW.**

- 3.3 Permittee shall provide for the permanent protection of the off-site HM Lands **within 24 months of the effective date of this agreement amendment by recording one or more conservation easements in the HM Lands in favor of CDFW or by recording one or more conservation easements encumbering the HM Lands in favor of a non-State entity approved by CDFW. CDFW must approve the form and substance of each conservation easement and may require a separate conservation easement for each legal parcel comprising the HM Lands. CDFW must approve the form and substance of each deed and reservation of conservation easement. In addition, Permittee shall provide for the permanent protection of the off-site HM Lands by transferring fee title to the properties to the Mendocino County Resource Conservation District (MCRCD) or another entity approved by CDFW under terms approved by DFGCDFW. Permittee shall transfer fee title with reservation of conservation easement within 12 months of meeting mitigation success criteria for a particular legal parcel or parcels or at such time as CDFW may approve. CDFW, in its sole discretion, may authorize a governmental entity, special district, non-profit organization, for-profit entity, person, or another entity to hold title to and manage the property provided that the district, organization, entity, or person meets the requirements of Government Code sections 65965-65968, as amended. If CDFW does not hold fee title to the HM lands, CDFW shall act as grantee for a conservation easement over the HM lands or shall, in its sole discretion, approve a non-profit entity, public agency, or Native American tribe to act as grantee for a conservation easement over the HM lands provided that the entity, agency, or tribe meets the requirements of Civil Code section 815.3. If CDFW does not hold the conservation easement, CDFW shall be expressly named in the conservation easement as a third-party beneficiary. The Permittee shall obtain CDFW written approval of any conservation easement before its execution or recordation. No conservation easement shall be approved by CDFW unless it complies with Government Code sections 65965-65968, as amended and includes provisions expressly addressing Government Code sections 65966(j) and 65967(e). If fee title is held by an entity other than DFG, a conservation easement in a form approved by DFG shall be recorded on title of the HM Lands. The grantee of the conservation easement may be DFG, a DFG-approved non-profit organization qualified pursuant to California Government Code section 65965, or a public agency approved by DFG and authorized to hold conservation easements. If a DFG-approved non-**

~~profit organization or approved public agency is grantee on a conservation easement, DFG shall be named third party beneficiary;~~

- 3.4 Permittee shall conduct a Property Analysis Record (PAR) or equivalent analysis to determine the appropriate endowment amount to fund the in-perpetuity management of the required HM Lands. Permittee shall provide the required endowment to ~~DFG~~**CDFW or another entity qualified pursuant to Government Code sections 65965-65968, as amended, within 6 months of CDFW approval of the PAR, and no later than December 30, 2014.** ~~after DFG reviews and approves the PAR. Monies received by DFG pursuant to this Condition shall be deposited in a special deposit account established pursuant to Fish and Game Code section 13014. DFG may pool the endowment with other endowments for the operation, management and protection of HM Lands for local populations of the Covered Species. Endowment funds provided as described above may alternatively be held by a DFG approved non-profit organization qualified to hold endowment funds;~~
- 3.5 ***The Permittee shall ensure that the HM lands are sufficiently funded for perpetual management, maintenance, and monitoring by the long-term land manager as described in this Amendment, the conservation easement(s), and the final MMP approved by CDFW. Permittee shall provide long-term management funding for the perpetual management of the HM Lands by establishing a long-term management fund (Endowment). The Endowment is a sum of money, held in a CDFW-approved fund that provides funds for the perpetual management, maintenance, monitoring, and other activities on the HM Lands consistent with the final State MMP required by Condition 3.2. Endowment as used in this Agreement shall refer to the endowment deposit and all interest, dividends, other earnings, additions and appreciation thereon, and as governed by Government Code sections 65965-65968, as amended, and Probate Code sections 18501-18510, as amended.***
- 3.6 ~~Permittee must complete the required acquisition, protection and transfer of all HM Lands and record the required conservation easements in favor of DFG within 18 months after the effective date of this Agreement.~~
- 3.7 ~~In addition to the off-site HM Lands identified above, Permittee shall conduct work to improve fish passage on Ryan Creek. In consultation with DFG~~**CDFW, Permittee shall prepare draft and final designs for a project to remediate existing barriers to fish passage at the South Fork (*Post Mile [PM] 52.25*) and North Fork (*PM 52.36*) Ryan Creek culverts on U.S. 101. *Draft sixty percent (60%) plans for both crossings shall be submitted to CDFW for review no later than April 31, 2014. Final ninety percent (90%) design plans for fish passage shall be submitted to CDFW for engineering review and approval no later than July 1, 2014.*** ~~Draft plans for both crossings will be submitted to DFG for review no later than June 30, 2011. Final plans will be prepared and submitted to DFG for approval no later than June 30, 2012.~~

- 3.8 ~~Permittee shall complete construction of the South Fork Ryan Creek culvert remediation project~~ **remediation of existing fish passage barriers on both the North Fork and the South Fork Ryan Creek** no later than October 31, 2018 2013.
- 3.9 Permittee shall prepare cost estimates for **remediation of existing fish passage barriers along US 101 in the Ryan Creek watershed, and shall apply for State Transportation Improvement Program (STIP) funding for fiscal year 2015-2016 to complete work in a timely manner on both the North Fork and the South Fork Ryan Creek. The remediation project shall incorporate the recommendations of a fluvial geomorphologist to ensure the project provides continuous passage that includes and incorporates the additional non-Caltrans stream crossings downstream and upstream of the U.S. 101 culverts.** ~~the passage improvement work on the North Fork Ryan Creek culvert based on the final design prepared under Condition 3.6 above and shall apply for funding to complete this work in a timely manner.~~

4. Reporting Measures

Permittee shall meet each reporting requirement described below.

- 4.1 Daily Monitoring Reports. Daily observations from the Designated Biologist during pile installation, dewatering and fish relocation, channel modification, and vegetation clearing activities shall be transmitted to **DFG CDFW** in electronic format on a weekly basis.
- 4.2 Quarterly Compliance Report: Permittee shall compile the observation and inspection records identified in Condition 4.1 above into a Quarterly Compliance Report and submit it to **DFG CDFW** **quarterly**, along with a summary of Project activities, the current implementation status of each mitigation measure **identified in this Agreement**, and any recommended modifications in monitoring methods.
- 4.3 Annual Status Report: Permittee shall provide **DFG CDFW** with an Annual Status Report (ASR) no later than January 31 of every year beginning with issuance of the Agreement and continuing until **DFG CDFW** accepts the Final Mitigation Report identified below. Each ASR shall include, at a minimum: 1) a summary of all Quarterly Compliance Reports identified in Condition 5.4, 2) a general description of the status of the Project site and Project activities, including actual or projected completion dates, if known; 3) a summary of the annual mitigation monitoring reports and the current implementation status of each mitigation measure **identified in this Agreement**; and 4) an assessment of the effectiveness of each completed or partially completed mitigation measure in minimizing and mitigating Project impacts.
- 4.4 Final Mitigation Report: No later than 60 days after completion of the Project, including completion of all **required** mitigation measures, Permittee shall

provide ~~DFG~~**CDFW** with a Final Mitigation Report. The Final Mitigation Report shall be prepared by the Designated Biologist and shall include, at a minimum: 1) a summary of all Monthly/Quarterly Compliance Reports and all ASRs, 2) copies of all mitigation monitoring reports documenting when success criteria for each of the mitigation measures were achieved; 3) all available information about Project-related incidental take of threatened or endangered species; 4) information about other Project impacts on threatened or endangered species; 5) dates of Project activities; 6) an assessment of the effectiveness of the required measures in minimizing and mitigating Project impacts ; 7) recommendations on how mitigation measures might be changed to more effectively minimize take and mitigate the impacts of future projects; and 8) any other pertinent information.

CONTACT INFORMATION

Any communication that Permittee or ~~DFG~~**CDFW** submits to the other shall be in writing and ~~any communication or documentation~~ shall be delivered to the address below by U.S. mail, fax, or email, or to such other address as Permittee or ~~DFG~~**CDFW** specifies by written notice to the other.

To Permittee:

Mr. Dave Kelley **Mauricio Serrano**
Department of Transportation
District 3
703 B Street, P.O. Box 911
Marysville, California 95901
Fax: (530) 741-4299
dave_kelley@dot.ca.gov
District 1 Project Manager
2379 Gateway Oaks Drive Suite 150
Sacramento, CA 95833 (MS-19)
Phone: (707) 502-7628
Mauricio.serrano@dot.ca.gov

To ~~DFG~~**CDFW**:

Department of Fish and Game **Wildlife**
Northern Region
601 Locust Street, Redding, California 96001
619 Second Street, Eureka, California 95501
Attn: Lake and Streambed Alteration Program —Craig Martz (**JoAnn Dunn**)
Notification #1600-2010-0044-R1
Fax: (530) 225-0324 **(707) 441-2021**
joann.dunn@wildlife.ca.gov **cmartz@dfg.ca.gov**

LIABILITY

Permittee shall be solely liable for any violations of the Agreement, whether committed by Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents or contractors and subcontractors, to complete the project or any activity related to it that the Agreement authorizes.

This Agreement does not constitute **DFG CDFW**'s endorsement of, or require Permittee to proceed with the project. The decision to proceed with the project is Permittee's alone.

SUSPENSION AND REVOCATION

DFG CDFW may suspend or revoke in its entirety the Agreement if it determines that Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, is not in compliance with the Agreement.

Before **DFG CDFW** suspends or revokes the Agreement, it shall provide Permittee written notice by certified or registered mail that it intends to suspend or revoke. The notice shall state the reason(s) for the proposed suspension or revocation, provide Permittee an opportunity to correct any deficiency before **DFG CDFW** suspends or revokes the Agreement, and include instructions to Permittee, if necessary, including but not limited to a directive to immediately cease the specific activity or activities that caused **DFG CDFW** to issue the notice.

ENFORCEMENT

Nothing in the Agreement precludes **DFG CDFW** from pursuing an enforcement action against Permittee instead of, or in addition to, suspending or revoking the Agreement.

Nothing in the Agreement limits or otherwise affects **DFG CDFW**'s enforcement authority or that of its enforcement personnel.

OTHER LEGAL OBLIGATIONS

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from obtaining any other permits or authorizations that might be required under other federal, state, or local laws or regulations before beginning the project or an activity related to it.

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from complying with other applicable statutes in the FGC including, but

not limited to, FGC sections 2050 et seq. (threatened and endangered species), 3503 (bird nests and eggs), 3503.5 (birds of prey), 5650 (water pollution), 5652 (refuse disposal into water), 5901 (fish passage), 5937 (sufficient water for fish), and 5948 (obstruction of stream).

Nothing in the Agreement authorizes Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, to trespass.

AMENDMENT

DEGCDFW may amend the Agreement at any time during its term if **DEGCDFW** determines the amendment is necessary to protect an existing fish or wildlife resource.

Permittee may amend the Agreement at any time during its term, provided the amendment is mutually agreed to in writing by **DEGCDFW** and Permittee. To request an amendment, Permittee shall submit to **DEGCDFW** a completed **DEGCDFW** "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the corresponding amendment fee identified in **DEGCDFW's** current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

TRANSFER AND ASSIGNMENT

This Agreement may not be transferred or assigned to another entity, and any purported transfer or assignment of the Agreement to another entity shall not be valid or effective, unless the transfer or assignment is requested by Permittee in writing, as specified below, and thereafter **DEGCDFW** approves the transfer or assignment in writing.

The transfer or assignment of the Agreement to another entity shall constitute a minor amendment, and therefore to request a transfer or assignment, Permittee shall submit to **DEGCDFW** a completed **DEGCDFW** "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the minor amendment fee identified in **DEGCDFW's** current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

EXTENSIONS

In accordance with FGC section 1605(b), Permittee may **has requested** one extension of the Agreement, ~~provided the request is made~~ prior to the expiration of the Agreement's term. ~~To request an extension,~~ Permittee shall **has submitted** to **CDFW** a completed **DEGCDFW** "Request to Extend Lake or Streambed Alteration" form and included with the completed form payment of the extension fee identified in **CDFW's** current fee schedule (see Cal. Code Regs., tit. 14, § 699.5). **CDFW has** shall processed the extension request in accordance with FGC 1605(b) through (e), **and agrees to extend the term of the Agreement to June 29, 2020.**

~~If Permittee fails to submit a request to extend the Agreement prior to its expiration, Permittee must submit a new notification and notification fee before beginning or continuing the project the Agreement covers (Fish & G. Code, § 1605, subd. (f)).~~

EFFECTIVE DATE

The Agreement becomes effective on the date of ~~DFG~~**CDFW**'s signature, which shall be: 1) after Permittee's signature; 2) after ~~DFG~~**CDFW** complies with all applicable requirements under the California Environmental Quality Act (CEQA); and 3) after payment of the applicable FGC section 711.4 filing fee listed at http://www.dfg.ca.gov/habcon/ceqa/ceqa_changes.html.

TERM

This Agreement shall expire on ~~December 31, 2015~~ **June 29, 2020**, unless it is terminated or extended before then. All provisions in the Agreement shall remain in force throughout its term. Permittee shall remain responsible for implementing any provisions specified herein to protect fish and wildlife resources after the Agreement expires or is terminated, as FGC section 1605(a)(2) requires.

AUTHORITY

If the person signing the Agreement (signatory) is doing so as a representative of Permittee, the signatory hereby acknowledges that he or she is doing so on Permittee's behalf and represents and warrants that he or she has the authority to legally bind Permittee to the provisions herein.

AUTHORIZATION

This Agreement authorizes only the project described herein. If Permittee begins or completes a project different from the project the Agreement authorizes, Permittee may be subject to civil or criminal prosecution for failing to notify ~~DFG~~**CDFW** in accordance with FGC section 1602.

CONCURRENCE

The undersigned accepts and agrees to comply with all provisions contained herein.

If you have any questions regarding this memorandum, please contact Ms. JoAnn Dunn, Senior Environmental Scientist (Specialist) at (707) 441-2076 or at joann.dunn@wildlife.ca.gov, or Mr. Curt Babcock, Habitat Conservation Program Manager at (530) 225-2740 or curt.babcock@wildlife.ca.gov.

Please sign and return one copy of this memorandum to acknowledge this amendment.

ACKNOWLEDGEMENT

I hereby agree to the above-referenced amendment.

Print Name: _____ Date: _____

Signature: _____

Prepared by: JoAnn Dunn, Senior Environmental Scientist (Specialist), March 10, 2014

STATE OF CALIFORNIA DEPARTMENT OF FISH AND GAME,
A MINOR AMENDMENT NO. 1
INCIDENTAL TAKE PERMIT (JULY 14, 2010) AND
ATTACHMENT 1
NOTIFICATION NO.2081-2010-007-01

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
NORTHERN REGION
601 LOCUST STREET
REDDING, CALIFORNIA 96001



AMENDMENT NO. 1
(A Minor Amendment)
California Endangered Species Act
Incidental Take Permit No. 2081-2010-007-01
California Department of Transportation
Willits Bypass in Mendocino County

INTRODUCTION

On July 14, 2010, the California Department of Fish and Wildlife (CDFW) issued Incidental Take Permit No. 2081-2010-007-01 (ITP) to the California Department of Transportation (Caltrans, Permittee) authorizing take of southern Oregon/northern California Coast coho salmon (*Oncorhynchus kisutch*) and North Coast semaphore grass (*Pleuropogon hooverianus*) (collectively, the Covered Species) associated with and incidental to the Willits Bypass in Mendocino County, California (Project). The Project as described in the ITP originally issued by CDFW includes a four-lane freeway bypass crossing the Little Lake Valley east of the City of Willits, beginning approximately 2.0 miles south of Willits and rejoining the existing two-lane highway about 1.3 miles north of the Willits city limits, with more than 1 mile proposed as floodway viaduct. In addition to erosion control and revegetation of temporary disturbance areas within the right-of-way for the bypass, the Project also included compensatory restoration, enhancement, and preservation activities required by various permitting agencies pursuant to their respective statutory and regulatory requirements. Although this mitigation would provide a net benefit to Covered Species, some aspects of the mitigation presented a risk of take of Covered Species, for which the ITP authorized take pursuant to CESA.

In issuing the ITP, CDFW found, among other things, that Permittee's compliance with the Conditions of Approval of the ITP would fully mitigate Project impacts of the taking on the Covered Species and that issuance of the ITP would not jeopardize the continued existence of the Covered Species.

The Permittee has requested this amendment for three reasons. First, Permittee requested the amendment to extend the ITP's timeframes to reflect an approximate 2-year Project delay, leaving the Permittee unable to comply with dates as required by the original ITP.

Second, the Permittee requested this amendment to revise estimates of the impact of the Covered Activities' take, mitigation acreages for Category I, II and III riparian

Rev. 2013.1.1

corridor habitat, as well as mitigation costs pursuant to the draft Property Analysis Record (PAR) proposed within the revised mitigation and monitoring proposal submitted to State Agencies (CDFW and the Regional Water Quality Control Board) in April 2013 (April 2013 Draft MMP). While the ITP's estimates were based on the best available information at the time, this amendment reflects updated estimates of the impact of the Covered Activities' take, affected acreages, mitigation acreages, and mitigation costs. For example, the revisions address the fact that resources occur together as components of the same habitat, and revises mitigation acreages to remove duplicative credits for resources mitigated (e.g., North Coast Semaphore Grass (NCSG) and wetland rehabilitation).

Third, the Permittee requested this amendment to obtain California Endangered Species Act (CESA) coverage for four modifications to Permittee's mitigation program that have been proposed since the issuance of the ITP. In a letter dated February 6, 2013, Permittee describes the four modifications as follows: (1) remediation of three additional erosion sites on Outlet Creek; (2) establishment of approximately 24 acres of wetlands in or adjacent to Covered Species habitat on three parcels on the west side of Outlet Creek and on two parcels on the east side of Davis Creek (collectively "Group 2 wetlands"); (3) implementation of grazing management measures such as rotational grazing and restricting cattle access to streams and riparian areas; and (4) implementation of an additional fish passage improvement action on North Fork Ryan Creek. In addition to these changes, since issuance of the ITP there have been minor changes in impact and mitigation acreages that are revised in this Amendment.

This Minor Amendment No. 1 (Amendment) makes the following changes to the existing ITP:

1. This Amendment changes the contact information for the Permittee and designated CDFW Representative.
2. This Amendment defines changes to the activities expected to result in the incidental take of individuals of the Covered Species.
3. This Amendment updates the existing ITP's Conditions of Approval.
4. This Amendment extends timeframes for Project and mitigation completion.
5. This Amendment recalculates Project-related impacts and the funding required to fully mitigate the Project-related impacts to Covered Species.
6. This Amendment includes revisions to the ITP Conditions of Approval related to the endowment for the Habitat Mitigation (HM) Lands, to comply with 2012 updates to the Government Code (Gov. Code, §§ 65965-65968, as amended by Stats. 2012, Ch. 705, § 2)

As set forth below, these changes will not significantly modify the scope or nature of the Project or the minimization, mitigation or monitoring measures previously authorized by CDFW in the ITP (Cal. Code Regs., tit. 14, § 783.6, subd. (c)(4).)

The Projects' long-term effects as described in this Amendment are anticipated to be beneficial as compared to those described in the 2010 ITP. Although the acreage described in 2010 as "preserved" will decline, as proposed in the amendment, the amount of rehabilitated acreage and acreage opened up to migrating SONCC coho salmon will increase substantially. Implementation of the fish passage project on the North Fork Ryan Creek will improve access to about 1.7 miles of spawning and rearing habitat in addition to the 2.7 miles that will be improved for access on the South Fork Ryan Creek. On-going erosion and sediment delivery to Outlet Creek will be minimized through wetland creation and bank erosion stabilization. Restricting grazing within riparian areas adjacent to streams, managing cattle crossing locations, and implementing a rotational grazing system is anticipated to result in long-term increased riparian vegetation and cover along streams, improved water quality, and is anticipated to increase SONCC coho salmon productivity in the Outlet Creek basin. Overall, the long-term benefits of implementing the mitigation actions are likely to outweigh the potential short-term effects of the mitigation construction activities.

AMENDMENT

The ITP is amended as follows (amended language in ***bold italics***; deleted language in ~~strikethrough~~):

1. The first page of the ITP, the name and title of the principal officer and contact person shall be amended to read:

Name and title of principal officer: ~~Dave Kelley~~ ***Mauricio Serrano***, Project Manager
Contact Person: ~~Jeremy Ketchum (916) 274-0621~~ ***Kendall Schinke (916) 274-0610***

2. The section titled Impacts of Taking on Covered Species, page 4 of the ITP shall be amended to read:

Project construction and mitigation activities that are expected to result in the incidental take of individuals of the Covered Species include: excavation and placement of fill material in wetlands, riparian habitats, and stream beds, banks and channels; removal of native wetland, riparian and upland vegetation; construction of temporary access roads and haul roads in wetlands, across streams, and through riparian habitats; construction of temporary and permanent stream crossings; removal of existing culverts that currently impede anadromous salmonid passage on Haehl, Upp, and Ryan

Minor Amendment No. 1
Incidental Take Permit 2081-2010-007-01
CALIFORNIA DEPARTMENT OF TRANSPORTATION
Willits Bypass

Creeks; reconstructing and maintaining stream reaches to provide improved fish passage; installing rock slope protection and/or other bank stabilization measures; dewatering of work areas in wetlands and streams for activities including temporary stream crossings, bridges and viaduct piers; capture and relocation of salmonids during dewatering activities; installation of piles using vibratory and percussive hammers; rehabilitation actions on NCSG such as seed collection and propagation, planting or transplanting, grazing and mowing, and installation of wick drains (Covered Activities).

The Project activities described above and their resulting impacts are expected to result in the incidental take of individuals of the Covered Species. Incidental take of juvenile SONCC coho salmon is likely to occur as a result of mortality due to construction activities within and adjacent to streams traversed by the bypass (direct impacts). In particular, juvenile SONCC coho salmon may be killed or injured due to (1) dewatering of work areas, (2) capture and handling during relocation activities, and (3) cumulative sound exposure levels produced during the driving of temporary and permanent piles for structure footings. In addition, the impacts of the taking on SONCC coho salmon include the permanent loss of 2.38 **4.8** acres of riparian habitat along Category I streams¹ and the temporary removal of an additional 8.15 **4.67** acres of riparian canopy along Category I streams. These reductions in riparian shade **and habitat** are expected to contribute to increased water temperatures and loss of shaded riverine aquatic habitat for juvenile fish. Vegetation removal, excavation, and other ground-disturbing activities adjacent to watercourses may also result in increased sediment deposition, degrading instream habitat by filling pools and adversely affecting production of benthic invertebrates.

Placement of fill material for the freeway embankment between Mill Creek and NWPRR right-of-way in the northern portion of the alignment will directly impact 0.404 **0.30** acre of occupied habitat for North Coast semaphore grass². Direct impacts include the permanent loss of 0.386 **0.22** acre (**less than** an estimated 2,798 plants) and temporary impacts on 0.045 **0.08** acre (an estimated 28 plants). Seed and plant propagules (rhizomes) **will be have been** collected from areas of permanent impact prior to construction for propagation and re-introduction to remaining areas of suitable habitat at this population site. In addition to directly affecting occupied habitat, placement of fill and installation of wick drains as part of roadway construction may indirectly affect the remaining 1.1 acres of occupied

¹ The increase in permanent impacts of riparian habitat along Category I streams is due to modification of permanent fill limits associated with bridge construction and fish passage work at the Haehl Creek interchange and an additional 1.27 acres of off-site wetland creation that is included within this Amendment. The additional wetland creation will result in a long-term benefit to SONCC coho salmon through improved water quality.

² The decrease in impact on NCSG is due to a change of median width from 45 feet to 25 feet in a 4.2-mile-long area, including NCSG occupied habitat.

habitat (an estimated 6,428 plants) at this location.

Impact mechanisms associated with indirect impacts include habitat fragmentation and degradation resulting from potential changes in drainage patterns and hydrology, introduction of weedy species, and soil compaction.

Indirect impacts to the Covered Species are expected to occur in the form of temporal losses, increased habitat fragmentation and edge effects, and the Project's incremental contribution to cumulative impacts. These impacts include: continued degradation of aquatic and terrestrial habitats, increased pollution, as well as increased vulnerability to predation and competition with non-native species. **To address indirect impacts, the project design includes elements that would minimize effects on the population from potential drainage patterns and hydrology impacts, including cross-cross culverts to maintain hydrology, and capture and treatment of roadway runoff to avoid impacts from roadway pollution.**

The areas where authorized take of the Covered Species is expected to occur include: the entire project footprint beginning at 0.8 mile (1.3 km) south of the Haehl Overhead (Laughlin Range, California topographic quadrangle, T18N, R13W, S32) and ending approximately 1.9 miles (2.9 km) south of Reynolds Highway (Willits, California topographic quadrangle, T18N, R13W, S7) where it rejoins US 101; Oilwell Hill; the North Fork of Ryan Creek and the South Fork of Ryan Creek where they pass under US 101, between Post Mile (PM) 52.1 and 52.5; and offsite mitigation areas as described in the February 2013 Addendum to the 2010 Incidental Take Permit Application (collectively, the Project Area).

3. The section titled Other Species Not Subject to the Take Authorization Provided by this ITP, page 5 of the ITP shall be amended to read:

~~Fully Protected Species. This ITP does not authorize the take of any fully protected species. (See Fish & G. Code §§ 3511, 4700, 5050, 5515.) DFG has advised the Permittee of the requirement to avoid take of fully protected species and believes the Permittee can implement the Project as described in this ITP in a manner consistent with the Fish and Game Code provisions governing fully protected species. DFG's determination regarding Project consistency with Fish and Game Code provisions governing fully protected species is based, in part, on Permittee's commitment, independent of this ITP, to implement and adhere to the following general avoidance and minimization measures during Project implementation related to white-tailed kite (*Elanus leucurus*), a species documented to occur within the vicinity of the Project. Permittee shall conduct pre-construction surveys during the courtship season to identify active nests within ¼ mile of the Project alignment. If an active white-tailed~~

~~kite nest is found during surveys, Permittee will employ an avian biologist who will determine and establish a no construction buffer of sufficient distance around the nest to ensure the adults are not disturbed and the young can successfully fledge.~~

This ITP does not authorize the take of any species other than the Covered Species, consequently this ITP does not authorize the take of fully protected species as defined by state law (See Fish & G. Code §§ 3511, 4700, 5050, 5515) CDFW has advised the Permittee that take of any species designated as fully protected under the Fish and Game Code is prohibited. CDFW recognizes that certain fully protected species are documented to occur within the vicinity of the Project, or that such species have some potential to occur on, or in, the Project due to the presence of suitable habitat.

4. The section titled Conditions of Approval, CEQA and ESA Compliance, page 6 of the ITP shall be amended to read:

2. CEQA and ESA Compliance. Permittee shall implement and adhere to the mitigation measures related to the Covered Species in the Biological Resources section of the Environmental Impact Report (SCH Number: 1990030006) certified by the Permittee as lead agency for the Project under the California Environmental Quality Act (CEQA) on December 15, 2006 and the Supplemental Environmental Impact Report certified by the Permittee on May 19, 2010. In addition, Permittee shall implement and adhere to all applicable terms and conditions ***related to the Covered Species*** in the Biological Opinion and Incidental Take Statement issued for the Project by the National Marine Fisheries Service (BO # 2010/01124), ***including any subsequent documents issued thereto, and all terms and conditions related to the Covered Species in the Biological Opinion issued for the Project by the U.S. Fish and Wildlife Service (EA 01-26000, Document No. P53181), including any subsequent documents thereto.***

5. The section titled Conditions of Approval, General Provisions, Mitigation and Monitoring Proposal, page 6 of the ITP shall be amended to read:

5.1. Mitigation and Monitoring Proposal. ~~Permittee shall implement and adhere to the mitigation measures related to the Covered Species in the Willits Bypass Project Final Mitigation and Monitoring Proposal (MMP) dated June 8, 2010, and any revisions to the MMP subsequently approved by DFG. Prior to initiating channel, vegetation, or ground disturbing activities, and no later than December 31, 2010, Permittee shall submit a detailed mitigation plan to DFG for review and approval that will be incorporated into the MMP.~~ ***The Permittee's April 2013 Draft MMP sets forth mitigation measures related to the Covered Species for CDFW review and approval. Prior to reinitiating Bypass construction work activities, the***

Permittee shall provide CDFW with a revised, Final MMP that meets CDFW's approval. CDFW will provide approval for the Final MMP in writing, and the Permittee shall adhere to the Final MMP approved by CDFW. The plan **Final MMP** shall include (1) a detailed description of the baseline condition of each parcel of habitat mitigation (HM) Lands acquired to offset impacts to the Covered Species, (2) a detailed description of the measures that will be used to restore and enhance the ecological functions of the HM Lands **to offset impacts to Covered Species**, including final design and planting details for habitat creation, revegetation, and enhancement actions, (3) a discussion of the parameters that will be monitored to determine changes in ecological functions, including the frequency of monitoring, methods that will be used, and criteria used to determine success **related to Covered Species**, (4) an adaptive management plan to be implemented in the event that expected results **related to Covered species** are not achieved, and (5) a long-term plan for managing and maintaining the HM lands after success criteria **related to Covered Species** have been met.

6. The section titled Conditions of Approval, General Provisions, Designated Representative, page 7 of the ITP shall be amended to read:

5.2. Designated Representative. Before initiating channel-, ground-, or vegetation-disturbing Project activities, Permittee shall ~~designate a representative~~ **notify CDFW in writing of the** Designated Representative) responsible for communications with ~~DFG~~ **CDFW** and overseeing compliance with this ITP. The Permittee shall ~~notify DFG in writing prior to commencement of channel-, ground-, or vegetation-disturbing activities of~~ **provide** the Designated Representative's name, business address, and contact information, and shall notify ~~DFG~~ **CDFW** in writing if a substitute Designated Representative is selected or identified at any time during the term of this ITP.

7. The section titled Conditions of Approval, General Provisions, Designated Biologist, page 7 of the ITP shall be amended to read:

5.3. Designated Biologists. At least 30 days before initiating channel-, ground-, or vegetation-disturbing activities **that may result in the incidental take of the Covered Species, the**, Permittee shall ~~has submitted~~ **has submitted** to ~~DFG~~ **CDFW** in writing, **for approval**, the name, qualifications, business address, and contact information for a biological monitors (Designated Biologists). The Designated Biologists shall be knowledgeable and experienced in the biology and natural history of the Covered Species. The Designated Biologists shall be responsible for monitoring Project activities and/or channel-, ground-, or vegetation-disturbing activities in areas of Covered Species' habitat to help minimize or avoid the incidental take of individual Covered Species and to **avoid or** minimize disturbance of Covered Species' habitat. ~~Permittee shall obtain DFG approval of the Designated Biologist prior to the~~

~~commencement of Project related activities that may result in the incidental take of the Covered Species.~~

8. The section titled Conditions of Approval, General Provisions, Designated Biologist Authority, page 7 of the ITP shall be amended to read:

5.4. Designated Biologist Authority. To ensure compliance with the Conditions of Approval of this ITP, the Designated Biologists shall have authority to immediately stop any activity that is not in compliance with this ITP, and/or to order **immediately recommend** any reasonable measures **to a Permittee representative that has the authority to issue a stop work order** to avoid the unauthorized take of an individual of the Covered Species or fully protected species. Neither the Designated Biologist nor DFG CDFW shall be liable for any costs incurred in complying with the Conditions of Approval, including cease-work orders issued by DFG CDFW.

9. The section titled Conditions of Approval, General Provisions, Delineation of Habitat, page 8 of the ITP shall be amended to read:

5.8. Delineation of Habitat. Permittee shall clearly delineate habitat of the Covered Species on the Project site with posted signs, posting stakes, flags, and/or rope or cord, and place fencing as necessary to minimize the disturbance of Covered Species' habitat. Permittee shall designate Covered Species habitat adjacent to the work area as Environmentally Sensitive Areas (ESAs) on the construction plans and construction personnel and equipment shall not enter these areas. Permittee shall install ESA fencing prior to initiating ~~vegetation clearing operations~~ **construction activities**. The location of all ESA fencing shall be inspected and approved by DFG CDFW prior to **Project construction activities involving vegetation removal or ground disturbance**.

10. The section titled Conditions of Approval, General Provisions, Vehicle Inspection, page 9 of the ITP shall be amended to read:

5.13. Vehicle Inspection. Permittee shall ensure that vehicles and equipment operated within or adjacent to the stream channel are free of **dirt, debris, noxious weeds and other harmful pests, and** oil or petroleum residues and are inspected and maintained on a daily basis to prevent leaks of materials that could be deleterious to aquatic life, wildlife, or riparian vegetation. **Vehicles and equipment that may contain dirt, debris, noxious weeds, or other harmful pests shall be appropriately cleaned to remove these contaminants prior to arriving at the Project site.**

11. The section titled Conditions of Approval, General Provisions, Refuse Removal, page 9 of the ITP shall be amended to read:

5.15. Refuse Removal. Upon completion of Project activities, **and prior to October 31 each year**, Permittee shall remove from the Project site and properly dispose of all temporary fill and construction refuse, including, but not limited to, broken equipment parts, wrapping material, cords, cables, wire, rope, strapping, twine, buckets, metal or plastic containers, and boxes.

12. The section titled **Stop Work Order**, found on Page 18 of the ITP, shall be moved to page 9 of the ITP and amended to read:

5.16. Stop Work Order. *CDFW may issue Permittee a written stop-work order requiring Permittee to suspend any Covered Activity for an initial period of up to 25 days to prevent or remedy a violation of this ITP and Amendments, including but not limited to the failure to comply with reporting or monitoring obligations, or to prevent the unauthorized take of any CESA endangered, threatened, or candidate species. Permittee shall stop work immediately as directed by CDFW upon receipt of any such stop-work order. Upon written notice to Permittee, CDFW may extend any stop-work order issued to Permittee for a period not to exceed 25 additional days. Suspension and revocation of this ITP shall be governed by California Code of Regulations, Title 14, section 783.7, and any other applicable law. Neither the Designated Biologist nor CDFW shall be liable for any costs incurred in complying with stop-work orders.*

13. The section titled Conditions of Approval, Monitoring, Notification and Reporting Provisions, Compliance Monitoring, page 10 of the ITP shall be amended to read:

6.3. Compliance Monitoring. ~~The~~ **A** Designated Biologist shall be on-site daily while Project activities, including all pile installation, dewatering, channel-, vegetation-, or ground-disturbing activities, that may affect Covered Species are taking place to: (1) minimize incidental take of the Covered Species; (2) check for compliance with all mitigation and avoidance measures; (3) check all exclusion zones; and (4) ensure that signs, stakes, and fencing are intact, and that human activities are restricted outside of these protective zones. ~~The Designated Representative or A~~ Designated Biologist shall prepare daily written observation and inspection records summarizing: **disturbance activities observed**, oversight activities and compliance inspections, observations of Covered Species, survey results, and monitoring activities required by this ITP. **The daily written observation and inspection report summaries shall be submitted to CDFW on a weekly basis while Project activities are taking place.** ~~The~~ **A** Designated Biologist shall conduct compliance inspections a

minimum of once per month during periods of inactivity and after clearing, grubbing, and grading are completed. ***During periods of inactivity, compliance inspection report summaries shall be submitted to CDFW on at least a monthly basis.***

14. The section titled Conditions of Approval, Monitoring, Notification and Reporting Provisions, Notification of Species Mortality, page 11 of the ITP shall be amended to read:

6.4. Quarterly Compliance Report. Permittee shall compile the observation and inspection records identified in Condition 6.3 into a Quarterly Compliance Report and submit it to DFG **CDFW** along with a copy of the MMRP table with notes showing the current implementation status of each mitigation measure. Quarterly Compliance Reports shall be submitted to DFG's Regional Office at the office listed in the Notices section of this ITP or via e-mail to DFG's Regional Representative. At the time of this ITP's amendment, the DFG **CDFW** Regional Representative is Staff Environmental Scientist, ~~Craig Martz~~ **JoAnn Dunn** (email address: ~~emartz@dfg.ca.gov~~ **joann.dunn@wildlife.ca.gov**). DFG **CDFW** may at any time increase the timing and number of compliance inspections and reports required under this provision depending upon the results of previous compliance inspections. If DFG **CDFW** determines the reporting schedule is inadequate, DFG **CDFW** will notify Permittee by letter of the new reporting schedule.

15. The section titled Conditions of Approval, Monitoring, Notification and Reporting Provisions, Notification of Species Mortality, page 11 of the ITP shall be amended to read:

6.7. Notification of Species Mortality. ~~If take³ of any SONCC coho salmon are killed by occurs during~~ a Project-related activity, or if any SONCC coho salmon are otherwise found dead within the Project site, Permittee **or Designated Biologist** shall immediately ~~notify the Designated Biologist. The Designated Biologist or Designated Representative shall~~ provide initial notification to DFG **CDFW's Regional Representative**, ~~by calling the Regional Office at (530) 225-2300.~~ The initial notification to DFG **CDFW** shall include information regarding the location, species, number of animals injured or killed **or otherwise taken**, and the ITP Number. Following initial notification, Permittee shall send DFG **CDFW** a written report within 2 calendar days. The report shall include the date and time of the finding or incident, location of the carcass, and, if possible, provide a photograph, explanation as to cause of death, and any other pertinent information.

³ Pursuant to Fish and Game Code section 86, "'Take' means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." See also *Environmental Protection Information Center v. California Department of Forestry and Fire Protection* (2008) 44 Cal.4th 459, 507 (for purposes of incidental take permitting under Fish and Game Code section 2081, subdivision (b), "'take' ... means to catch, capture or kill").

16. The section titled Conditions of Approval, Take Minimization Measures, Work in Streams, page 11 of the ITP shall be amended to read:

7.1. Work in Streams and Removal of Riparian Vegetation. *Except for removal of aboveground portions of riparian vegetation*, Permittee shall confine all construction work within the bed, channel, or banks of any stream to the period of June 15 through October 15. If the stream is dry ***or discontinuous*** and/or advance written approval is obtained from CDFW, then Permittee may conduct work outside of the June 15 through October 15 construction window.

17. The section titled Conditions of Approval, Take Minimization Measures, Removal of Riparian Vegetation, page 11 of the ITP shall be amended to read:

~~**7.2 Removal of Riparian Vegetation.** Notwithstanding Condition 7.1 above, Permittee shall ensure that removal of above ground riparian vegetation from the streambanks only occurs between September 1 and January 31 of any year to avoid impacts to migratory birds. Permittee shall remove all cleared material/vegetation from the riparian/stream zone and dispose of it properly. Permittee shall ensure that disturbance or removal of riparian vegetation does not exceed the minimum necessary to complete construction. Where feasible, hand tools (chain saws, etc.) shall be used to trim vegetation to the extent necessary to gain access to work sites. Whenever possible, root systems shall be left intact to facilitate more rapid recovery following temporary construction impacts.~~

7.2 Text deleted.

18. The section titled Conditions of Approval, Take Minimization Measures, Hydroacoustic Monitoring, page 12 of the ITP shall be amended to read:

7.4. Hydroacoustic Monitoring. If surface water is present within the channel, Permittee shall conduct hydroacoustic monitoring to document peak sound pressure levels and cumulative sound exposure levels during all permanent pile-driving activities in the channel or within 50 feet of the channel. Permittee shall also monitor the driving of temporary trestle and falsework piles below the top of bank. ***Permittee has submitted a Hydroacoustic Monitoring Plan that has been reviewed and approved by CDFW.*** If underwater sound pressure levels for each pile type and size do not vary to a large degree, the Permittee may request written approval from DFG ~~***CDFW***~~ to discontinue hydroacoustic monitoring. ~~Permittee shall submit a Hydroacoustic Monitoring Plan for review and approval by DFG no later than March 15, 2011.~~

19. The section titled Conditions of Approval, Take Minimization Measures, Stream Dewatering, page 12 of the ITP shall be amended to read:

7.7 Stream Dewatering. ~~If pile driving activities are expected to exceed interim SEL-Cumulative threshold levels for more than two consecutive days, Permittee shall dewater the affected stream reach in lieu of using block nets to exclude fish. During~~ **If dewatering is required,** Permittee shall incrementally divert flows in the affected reach to facilitate fish capture and relocation. Flows shall be reduced over a minimum 4-hour period in the following increments: 50%, 75%, 90%, and 100%.

20. The section titled Conditions of Approval, Take Minimization Measures, Fish Passage, page 13 of the ITP shall be amended to read:

7.9. Fish Passage. Permittee shall ensure that installation of permanent culverts, bridges, grade control structures, instream habitat enhancement features, **bank erosion control actions**, and other channel modifications do not impede the passage of fish up or down stream. Permittee shall submit detailed designs for work within the stream channel to ~~DFG~~ **CDFW** for review and approval **at least 60 days prior to proposed work.** ~~no later than August 1, 2010.~~

21. The section titled Conditions of Approval, Take Minimization Measures, Grass Population Maintenance, page 14 of the ITP shall be amended to read:

7.16. Grass Population Maintenance. In consultation with ~~DFG~~ **CDFW** and a qualified botanist, Permittee shall develop a maintenance prescription for the right-of-way that is compatible with the ecological requirements of North Coast semaphore grass **no later than December 31, 2015.** The prescription shall specify mowing schedules and restrict incompatible activities such as blading or herbicide application. Permittee shall ensure that local maintenance personnel understand and implement the management prescription for this section of right-of-way.

22. The section titled Conditions of Approval, Mitigation Measures/Compensation for Take, Fish Barrier Removal Plan, page 14 of the ITP shall be amended to read:

8.1. Fish Barrier Removal Plan. In consultation with ~~DFG~~ **CDFW**, Permittee shall prepare draft and final designs for a project to remediate existing barriers to fish passage at the South Fork (PM 52.25) and North Fork (PM 52.36) Ryan Creek culverts on U.S. 101. Draft **design** plans for both crossings shall be ~~have been~~ submitted to ~~DFG~~ **CDFW** for review ~~no later than June 30, 2011~~ **by December 31, 2013.** Final **design** plans shall be prepared and submitted to ~~DFG~~ **CDFW** for approval ~~no later than June 30, 2012.~~ **July 1, 2014.**

23. The section titled Conditions of Approval, Mitigation Measures/Compensation for Take, Fish Barrier Removal Completion, page 14 of the ITP shall be amended to read:

8.2. Fish Barrier Removal Completion. Permittee shall complete construction of the **North Fork and South Fork Ryan Creek** culvert remediation project no later than October 31, 2013 **2018**.

24. The section titled Conditions of Approval, Mitigation Measures/Compensation for Take, Fish Barrier Removal Funding, page 14 of the ITP shall be amended to read:

8.3. Fish Barrier Removal Funding. Permittee shall prepare cost estimates for the **Ryan Creek** passage improvement work on the North **and South** Fork Ryan Creek culvert **crossings** based on the final designs prepared under Condition 8.1 above, and shall apply for **State Transportation Improvement Program** funding **in fiscal year 2015-2016** to complete this work in a timely manner **at both locations**.

25. The section titled Conditions of Approval, Mitigation Measures/Compensation for Take, HM Lands Acquisition and Management, page 14 of the ITP shall be amended to read:

~~8.4. HM Lands Acquisition and Management. Prior to initiating channel ground or vegetation disturbing Project activities, or no later than 18 months from the effective date of this ITP if security is provided pursuant to Condition 9, Permittee shall acquire and permanently preserve 1,486 acres of HM Lands for the Covered Species identified in the final MMP. Of this total, Permittee shall create 47.57 acres, enhance 48.51 acres, and preserve 100.40 acres of riparian habitat on approximately 1,416 acres of HM Lands to fully mitigate for the incidental taking of SONCC coho salmon that will occur as a result of the temporary and permanent habitat loss and mortality of individuals related to other Project activities. In addition, Permittee shall acquire, restore, and permanently preserve four extant populations of North Coast semaphore grass totaling 5.094 acres on an additional 70 acres of HM Lands to fully mitigate for the incidental taking of North Coast semaphore grass that will occur as a result of Project activities. A restoration and management plan for the HM Lands shall be prepared and submitted to DFG for approval within 18 months after the issuance of this ITP. The plan shall specify vegetation management actions and enhancement measures designed to result in a net expansion of existing North Coast semaphore grass populations on the HM Lands.~~

~~DFG estimates that acquisition of appropriate HM Lands to mitigate for impacts to Covered Species will cost approximately \$7,800/acre for 1,486 acres for a total of approximately \$11,590,800.00.~~

8.4. HM Lands Acquisition and Management. Permittee has acquired approximately 1,795 acres of mitigation lands to mitigate for the Project's impacts. Of this total, Permittee shall permanently preserve and manage approximately 1,489 acres for the Covered Species, pursuant to the Final MMP. To fully mitigate for the incidental taking of SONCC coho salmon that will occur as a result of the temporary and permanent habitat loss and mortality of individuals related to other Project activities, Permittee shall manage approximately 1416 acres of HM Lands to establish 43.89 acres of Category I riparian habitat, rehabilitate 81.80 acres of Category I riparian habitat, and protect and preserve 5.42 acres of existing Category I riparian habitat. In addition, to fully mitigate for the incidental taking of North Coast semaphore grass, Permittee shall restore, and permanently preserve four extant populations of North Coast semaphore grass totaling 5.09 acres, and establish 2.97 acres on approximately 73 acres of HM Lands. Permittee shall prepare a restoration and management plan for the North Coast semaphore grass and submit the plan to CDFW for approval no later than July 1, 2015. The plan shall specify vegetation management actions and enhancement measures designed to result in a net expansion of existing North Coast semaphore grass populations on the HM Lands. The Permittee shall provide CDFW with a revised restoration and management plan for the North Coast semaphore grass that meets CDFW's approval no later than 60 days after receiving CDFW comments on the draft document. CDFW will provide approval for the revised restoration and management plan for the North Coast Semaphore grass in writing. As part of this condition, Permittee shall do all of the following:

~~8.4.1. Transfer fee title to the HM Lands to the Mendocino County Resource Conservation District (MCRCD) or another entity under terms approved by DFG. If fee title is held by an entity other than DFG, a conservation easement in a form approved by DFG shall be recorded on title of the HM Lands. The grantee of the conservation easement may be DFG, a DFG-approved non-profit organization qualified pursuant to California Government Code section 65965, or a public agency approved by DFG and authorized to hold conservation easements. If a DFG-approved non-profit organization or approved public agency is grantee on a conservation easement, DFG shall be named third party beneficiary;~~

~~8.4.2 Provide a recent preliminary title report, initial hazardous materials survey report, and other necessary documents specified in Attachment 2 and/or requested by the DFG Regional Representative. The Permittee shall be responsible for all costs associated with obtaining and providing the required documents. All documents conveying the HM Lands and all conditions of title are subject to the approval of DFG, the Wildlife Conservation Board and if applicable, the Department of General Services;~~

8.4.3. Provide for the initial protection and enhancement of HM Lands as described in the final MMP. DFG estimates that initial protection and enhancement will cost approximately \$4,590.40/acre for 1,416 acres of HM Lands for SONCC coho salmon, for a total of \$6,500,000.00. Additionally, DFG estimates that initial protection and enhancement will cost approximately \$6,647.45/acre for 70 acres of HM Lands for North Coast semaphore grass, for a total of \$465,321.00. Total initial protection and enhancement costs are estimated at \$6,965,321.00.

8.4.4. Provide for the perpetual management of the HM Lands to benefit the Covered Species by doing the following:

Conduct a Property Analysis Record (PAR) or equivalent analysis for the HM Lands that have been identified to determine the appropriate endowment amount to fund the in-perpetuity management of the 1,486 acres of required HM Lands. Permittee shall provide the required endowment to DFG after DFG reviews and approves the PAR. Permittee shall demonstrate that sufficient funds have been allocated for the endowment as described in Condition 9 below.

Interest from the endowment amount shall be available for reinvestment in the principal and for the long-term operation, management, and protection of the HM Lands, including reasonable administrative overhead, biological monitoring, improvements to biological carrying capacity, law enforcement measures, and any other action designed to protect or improve the habitat values of the HM Lands. Monies received by DFG pursuant to this Condition may be deposited in a special deposit account established pursuant to Fish and Game Code section 13014. DFG may pool the endowment with other endowments for the operation, management and protection of HM Lands for local populations of the Covered Species. Endowment funds provided as described above may alternatively be held by a DFG-approved non-profit organization qualified to hold endowment funds;

8.4.5. Reimburse DFG for reasonable expenses incurred during title and documentation review, expenses incurred from other state agency reviews, and overhead related to transfer of HM Lands to DFG. DFG estimates that this Project will create an additional cost to DFG of no more than \$3,000 for every fee title deed or easement processed.

8.4.1. Conservation Easement. Within 24 months of the effective date of this ITP Amendment, Permittee shall provide for the permanent protection of the off-site HM Lands by recording one or more conservation easements

in the HM Lands in favor of CDFW or by recording one or more conservation easements encumbering the HM Lands in favor of a non-State entity approved by CDFW. CDFW must approve the form and substance of each conservation easement and may require a separate conservation easement for each legal parcel comprising the HM Lands.

8.4.2. Conservation Easement and Fee Title Transfer. *In addition, Permittee shall provide for the permanent protection of the off-site HM Lands by transferring fee title to the properties to an entity approved by CDFW under terms approved by CDFW as described below subject to the conservation easement over the transferred HM Lands in favor of CDFW or another entity approved by CDFW. CDFW must approve the form and substance of each deed and reservation of conservation easement. Permittee shall transfer fee title with reservation of conservation easement according to the requirements of Conditions 8.4.1 and 8.4.2 within 12 months after all mitigation success criteria for a particular legal parcel or parcels have been met or at such time as CDFW may approve. CDFW, in its sole discretion, may authorize a governmental entity, special district, non-profit organization, for-profit entity, person, or another entity to hold title to and manage the property provided that the district, organization, entity, or person meets the requirements of Government Code sections 65965-65968, as amended. If CDFW does not hold fee title to the HM lands, CDFW shall act as grantee for a conservation easement over the HM lands or shall, in its sole discretion, approve a non-profit entity, public agency, or Native American tribe to act as grantee for a conservation easement over the HM lands provided that the entity, agency, or tribe meets the requirements of Civil Code section 815.3. If CDFW does not hold the conservation easement, CDFW shall be expressly named in the conservation easement as a third-party beneficiary. The Permittee shall obtain CDFW written approval of any conservation easement before its execution or recordation. No conservation easement shall be approved by CDFW unless it complies with Government Code sections 65965-65968, as amended and includes provisions expressly addressing Government Code sections 65966(j) and 65967(e).*

8.4.3. Conveyance Documents. *Permittee shall provide a recent preliminary title report, initial hazardous materials survey report, and other necessary documents specified in Attachment 2 and/or requested by the CDFW Regional Representative. The Permittee shall be responsible for all costs associated with obtaining and providing the required documents. All documents conveying the HM Lands and all conditions of title are subject*

to the approval of CDFW, the Wildlife Conservation Board and if applicable, the Department of General Services;

8.4.4. Land Manager. Permittee shall designate both an interim and long-term land manager approved by CDFW. The interim and long-term land managers may, but need not, be the same. The interim and/or long-term land managers may be the landowner or another party. Documents related to land management shall identify both the interim and long-term land managers. Permittee shall notify CDFW of any subsequent changes in the land manager within 30 days of the change. If CDFW will hold fee title to the mitigation land, CDFW will also act as both the interim and long-term land manager unless otherwise specified.

8.4.5. Interim Management (Initial and Capital). Permittee shall provide for the interim management of the HM lands including start-up and initial site protection and enhancement. The Permittee shall implement the start-up and interim management of the HM lands as described in the Final MMP and conservation easement approved by CDFW. Start-up activities include, at a minimum: (1) preparing a Final MMP for CDFW approval; (2) conducting a baseline biological assessment and land survey report; (3) developing and transferring Geographic Information Systems (GIS) data if applicable; (4) establishing initial fencing; (5) conducting litter removal; (6) conducting initial habitat restoration or enhancement, if applicable; and (7) installing signage. The interim management period shall be a minimum of five years from the date of HM land acquisition and protection and full funding of the Endowment and includes expected management following start-up activities. Unless otherwise approved by CDFW, the interim management period for any portion of the HM Lands shall only end upon that portion of land's transfer of title for permanent protection as described in Conditions 8.4.1 and 8.4.2 above. Interim management period activities described in the Final MMP shall include fence repair, continuing trash removal, site monitoring, vegetation and invasive species management, and maintenance of all parcels following meeting success criteria until such time as property is transferred to the long-term land manager. Permittee shall either (1) provide a security to CDFW for the minimum of five years of interim management that the land owner, Permittee, or interim land manager agrees to manage and pay for at their own expense, (2) establish an escrow account with written instructions approved in advance in writing by CDFW to pay the interim land manager annually in advance, or (3) establish a short-term enhancement account with CDFW or a CDFW-approved entity for payment to the interim land manager. The interim management costs of the 1416 acres of mitigation lands for SONCC coho

salmon, as well as the 73 acres of mitigation lands for North Coast semaphore grass, are subsets of the interim management costs for the entire 1,795-acre HM Lands. CDFW estimates the total interim management costs for Covered Species on the HM Lands to be approximately \$6,985,265: (1) \$4,590.40/acre for 1,416 acres for SONCC coho salmon, totaling approximately \$6,500,000; and (2) \$6,647.45/acre for 73 acres for North Coast semaphore grass, totaling approximately \$485,265.

8.4.6. Endowment Fund. The Permittee shall ensure that the HM lands are sufficiently funded for perpetual management, maintenance, and monitoring by the long-term land manager as described in this ITP Amendment, the conservation easement, and the final MMP approved by CDFW. Permittee shall provide long-term management funding for the perpetual management of the HM Lands by establishing a long-term management fund (Endowment). The Endowment is a sum of money, held in a CDFW-approved fund that provides funds for the perpetual management, maintenance, monitoring, and other activities on the HM Lands consistent with the Final State MMP required by Condition of Approval 5.1. Endowment as used in this ITP shall refer to the endowment deposit and all interest, dividends, other earnings, additions and appreciation thereon. The Endowment shall be governed by this ITP, Government Code sections 65965-65968, as amended, and Probate Code sections 18501-18510, as amended.

After the interim management period, the designated long-term land manager shall implement the management and monitoring of the HM Lands according to the Final MMP. The long-term land manager shall be obligated to manage and monitor the HM lands in perpetuity to preserve their conservation values in accordance with this ITP, the conservation easement, and the Final MMP. Such activities shall be funded through the Endowment.

8.4.6.1. Identify an Endowment Manager. The Endowment shall be held by the Endowment Manager, which shall be either CDFW or another entity qualified pursuant to Government Code sections 65965-65968, as amended. Permittee shall submit to CDFW a written proposal that includes: (i) the name of the proposed Endowment Manager; (ii) whether the proposed Endowment Manager is a governmental entity, special district, nonprofit organization, community foundation, or congressionally chartered foundation; (iii) whether the proposed Endowment Manager holds the property or an interest in the property for conservation purposes as required by Government Code section

65968(b)(1) or, in the alternative, the basis for finding that the Project qualifies for an exception pursuant to Government Code section 65968(b)(2); and (iv) a copy of the proposed Endowment Manager's certification pursuant to Government Code section 65968(e). Within thirty days of CDFW's receipt of Permittee's written proposal, CDFW shall inform Permittee in writing if it determines the proposal does not satisfy the requirements of Fish and Game Code section 2081(b)(4) and, if so, shall provide Permittee with a written explanation of the reasons for its determination. If CDFW does not provide Permittee with a written determination within the thirty-day period, the proposal shall be deemed consistent with Section 2081(b)(4).;

8.4.6.2. Calculate the Endowment Funds Deposit. After obtaining CDFW written approval of the HM lands, long-term management plan, and Endowment Manager, Permittee shall prepare a Property Analysis Record (PAR) [or PAR-equivalent analysis (hereinafter "PAR")] to calculate the amount of funding necessary to ensure the long-term management of the HM lands (Endowment Deposit Amount). The Permittee shall submit to CDFW for review and approval the results of the PAR before transferring funds to the Endowment Manager.

8.4.6.2.1. Capitalization Rate and Fees. Permittee shall obtain the capitalization rate from the selected Endowment Manager for use in calculating the PAR and adjust for any additional administrative, periodic, or annual fees.

8.4.6.2.2. Endowment Buffers/Assumptions. Permittee shall include in PAR assumptions the following buffers for endowment establishment and use that will substantially ensure long-term viability and security of the Endowment:

8.4.6.2.2.1. 10 Percent Contingency. A 10 percent contingency shall be added to each endowment calculation to hedge against underestimation of the fund, unanticipated expenditures, inflation, or catastrophic events.

8.4.6.2.2.2. Three Years Delayed Spending. The endowment shall be established assuming spending will not occur for the first three years after full funding.

8.4.6.2.2.3. Non-annualized Expenses. For all large capital expenses to occur periodically but not annually such as fence

replacement or well replacement, payments shall be withheld from the annual disbursement until the year of anticipated need or upon request to Endowment Manager and CDFW.

8.4.6.3. Transfer Long-term Endowment Funds. *Permittee shall transfer the long-term endowment funds to the Endowment Manager upon CDFW approval of the Endowment Deposit Amount identified above. The approved Endowment Manager may pool the Endowment with other endowments for the operation, management, and protection of HM lands for local populations of the Covered Species but shall maintain separate accounting for each Endowment. The Endowment Manager shall, at all times, hold and manage the Endowment in compliance with this ITP, Government Code sections 65965-65968, as amended, and Probate Code sections 18501-18510, as amended.*

8.4.7. Reimburse CDFW. *Permittee shall reimburse CDFW for all reasonable expenses incurred by CDFW such as transaction fees, account set-up fees, administrative fees, title and documentation review and related title transactions, expenses incurred from other state agency reviews, and overhead related to transfer of HM lands to CDFW.*

26. The section titled Conditions of Approval, Performance Security, Funding Assurance, page 16 of the ITP shall be amended to read:

9.1. **Funding Assurance.** Permittee may proceed with channel-, ground-, or vegetation-disturbing activities before completing all of the mitigation, monitoring and reporting activities required in the Conditions of Approval of this ITP only if Permittee ensures funding to complete those activities by providing to ~~DFG~~-**CDFW**, prior to commencing ***Bypass construction-related*** ground- or vegetation disturbing activities ***in 2014*** or within 30 days after the effective date of this ITP ***Amendment***, ~~whichever occurs first~~, written documentation that the Permittee has allocated sufficient funds, acceptable to and approved by ~~DFG~~-**CDFW**, to ensure implementation of the Conditions of Approval of this ITP.

The written documentation shall identify and display in itemized form, at a minimum, the following estimated costs of implementing the ITP's mitigation, monitoring, and reporting requirements, which total \$34,556,121.00. ***approximately \$35,623,690, and which include but are not limited to the ITP's mitigation, monitoring and reporting requirements for Covered Species.*** The written documentation submitted by the Permittee to satisfy this Condition shall be on official ~~Caltrans~~ letterhead and signed by both the District Deputy Director of Project Management and the District Deputy Director of Environment, and shall include a statement that

the funds identified have been allocated specifically for the purpose of fulfilling the Permittee's mitigation obligations associated with this ITP and will not be redirected for other Project purposes.

Even if the Funding Assurance is provided, Permittee must complete the required acquisition, protection, and transfer of all HM Lands and record the required conservation easements pursuant to Condition 8.4.4 ~~within 18 months of the effective date of this ITP.~~

9.1.1. Project design costs for fish passage improvement at the existing U.S. 101 culverts on the North and South Forks of Ryan Creek, as well as implementation costs for the remediation work on the South Fork Ryan Creek crossing, estimated at ~~\$4,000,000.00~~; **and implementation costs for the North Fork Ryan Creek crossing, estimated at approximately \$1,000,000;**

9.1.2. Land acquisition costs for impacts to habitat, *which were* calculated at \$7,800.00/acre for 1,486 ~~1489~~ acres: ~~approximately \$11,590,800.00~~ **\$11,614,200, and which include but are not limited to the costs to acquire land to mitigate for SONCC coho salmon and North Coast semaphore grass habitats;**

9.1.3. Costs of enhancing *interim enhancement of* HM Lands, *which were* calculated at (a) \$4,590.40/acre for 1416 acres: ~~approximately \$6,500,000~~; and (b) \$6,647.45/acre for 70 acres: ~~\$465,321.00~~ **73 acres: approximately \$485,265** for a total *interim* enhancement cost of ~~\$6,965,321.00~~ **approximately \$6,985,265. These costs include but are not limited to interim management of HM lands for SONCC coho salmon and North Coast semaphore grass.**

9.1.4. Endowment estimate, *The endowment estimate is* calculated at \$8,075.37/acre for 1,486 ~~1,489~~ acres: ~~approximately \$12,000,000.00⁴~~ **\$12,024,225⁴, and includes but is not limited to the endowment for the perpetual management, maintenance, and monitoring by the long-term land manager as described in this ITP, the CE, and the Final MMP as related to Covered Species.**

~~9.2. Date of Acquisition of HM Lands. Permittee must complete the required acquisition, protection and transfer of all HM Lands and record the required conservation easements in favor of DFG within 18 months of the effective date of~~

⁴ This figure represents an estimate of the total endowment principal. The actual endowment amount shall be based on a Property Analysis Record or equivalent analysis for individual HM Lands as described in Condition 8.4.6.2. 7.4.4 of this ITP.

~~this ITP.~~

27. The section titled Stop-Work Order, page 18 of the ITP shall be amended to read:

Stop-Work Order:

~~DFG may issue Permittee a written stop work order to suspend any activity covered by this ITP for an initial period of up to 25 days to prevent or remedy a violation of ITP conditions(including but not limited to failure to comply with reporting, monitoring, or habitat obligations) or to prevent the illegal take of an endangered, threatened, or candidate species. Permittee shall comply with the stop work under this provision for a period not to exceed 25 additional days, upon written notice to the Permittee. DFG shall commence the formal suspension process pursuant to California Code of Regulations, Title 14, section 783.7, within five working days of issuing a stop work order.~~

Text amended and moved to page 9, Conditions of Approval, General Provisions, 5.16. Stop Work Order.

28. The Regional Representative under the section titled Notices, page 19 of the ITP shall be amended to read:

Craig Martz
601 Locust Street
Redding CA 96001
Telephone (530) 225-2281
Fax (530) 225-0324

JoAnn Dunn
619 Second St.
Eureka, CA 95501
Email: joann.dunn@wildlife.ca.gov
Telephone: (707) 441-2076
Fax: (707) 441-2021

All terms and conditions of the ITP and MMRP that are not expressly amended herein remain in effect and must be implemented and adhered to by the Permittee.

FINDINGS

Issuance of this Amendment will not increase the amount of take of the Covered Species compared to the Project as originally approved, nor will this Amendment increase other Project impacts on the Covered Species (i.e., "impacts of taking" as used in Fish and Game Code Section 2081, subd. (b)(2)).

Discussion: This Amendment modifies the ITP by: (1) incorporating numerous non-substantive changes (e.g., changes to contact information); (2) extending timeframes to accommodate Project delays; (3) providing changes based upon more recent data that revised estimates of the impacts resulting from the Project's take of Covered species, estimates of mitigation measures,⁵ and estimates of mitigation costs; and (4) makes four specific modifications to the Project and mitigation plan. This Amendment will not increase other Project-related impacts to the Covered Species because the types of remediation activities authorized by the ITP remain unchanged.

The four specific modifications consist of: (1) repairing three approximately 6-foot high bank erosion sites along the east side of Outlet Creek; (2) establishing approximately 24 acres of wetlands on three parcels on the west side of Outlet Creek and on two parcels on the east side of Davis Creek; (3) implementation of rotational grazing management actions on selected offsite mitigation parcels; and (4) improvements to fish passage on the North Fork Ryan Creek. These actions are described in the U.S. Army Corps of Engineers (USACE) January 2012 MMP and the April 2013 State MMP. The resulting impacts to the Covered Species as a result of adoption of language modifications and the four mitigation actions identified for the Willits Bypass Project will remain the same.

The total Category I riparian habitat removed as a result of bypass and mitigation activities will be 1.06 acres less than the total area evaluated in the 2010 ITP. Although impacts of the taking on SONCC coho salmon include the permanent loss of 4.8 acres of riparian habitat along Category I streams, an increase of 2.42 acres over that proposed in 2010, 1.27 acres of this loss is caused by grading and wetland establishment. Temporary loss of riparian habitat along Category I streams has been reduced from 8.15 acres to 4.67 acres since 2010.

Short-term effects of wetland establishment, bank erosion repair, and fish passage remediation include noise, vibrations, increase in turbidity and sediment to streams, degradation of instream habitat, potential introduction of toxic substances to aquatic habitats, reductions in riparian shade that may be expected to contribute to increased water temperatures, and other physical disturbances. The magnitude of short-term effects depend on several factors including the type and intensity of disturbance, proximity to fish, timing of actions relative to fish life stages, and frequency and duration of activities. Effects on SONCC coho salmon will be limited due to typical avoidance behavior by fish in response to movement, noise and shadows cause by construction personnel and equipment. Bank erosion repair would occur between the toe and the top of the bank, limiting fish exposure to activities and minimizing the likelihood of direct mortality. By limiting construction activities to a single yearly construction period between June 15 and October 15, when Outlet Creek is often dry or discontinuous, and Ryan Creek will be at its lowest, the primary spawning and migration periods of SONCC

⁵ Note the April 2013 State MMP's tables contain several errors; where numbers differ, the numbers in this ITP amendment are the correct figures.

coho salmon would be avoided and the risks associated with erosion and transport of fine sediments to downstream habitats would be minimized. If water is present at Ryan Creek or other sites during construction, fish removal and relocation may be necessary using seines and/or electrofishing. As nearly all SONCC coho salmon smolts are expected to have moved past the project area by June 15, any fish removal will involve juvenile (i.e., non-smolting) fish.

Long-term effects of the Project as described in this Amendment are anticipated to be beneficial as compared to those described in the 2010 ITP. Although the acreage described in 2010 as "preserved" will decline, as proposed in 2013, the amount of rehabilitated acreage and acreage made newly available to migrating SONCC coho salmon will increase substantially. Implementation of the fish passage project on the North Fork Ryan Creek will improve access to about 1.7 miles of spawning and rearing habitat in addition to the 2.7 miles that will be improved for access on the South Fork Ryan Creek. On-going erosion and sediment delivery to Outlet Creek will be minimized through wetland creation and bank erosion stabilization. Restricting grazing within riparian areas adjacent to streams, managing cattle crossing locations, and implementing a rotational grazing system is anticipated to result in long-term increased riparian vegetation and cover along streams, improved water quality, and is anticipated to increase SONCC coho salmon productivity in the Outlet Creek basin. Overall, the long-term benefits of implementing the mitigation actions are likely to outweigh the potential short-term effects of the mitigation construction activities.

Issuance of this Amendment does not affect CDFW's previous determination that issuance of the ITP meets and is otherwise consistent with the permitting criteria set forth in Fish and Game Code section 2081, subdivisions (b) and (c).

Discussion: CDFW determined in July 2010 that the Project, as approved, met the standards for issuance of an ITP under CESA. This determination included findings that, among other things, the impacts of the taking would be minimized and fully mitigated and that the Project would not jeopardize the continued existence of the Covered Species. Those findings are unchanged with respect to this Amendment because the Project and ITP as amended: (1) does not substantively alter the level or severity of Project impacts on the Covered Species, (2) does not substantively alter the measures that will be undertaken to minimize and mitigate previously-authorized impacts to the Covered Species, (3) increases mitigation acreage specifically for North coast semaphore grass, (4) requires in-channel work to be completed during low or no flows, when juvenile SONCC coho salmon are not likely to be present; (5) provides for grazing management to reduce current impact levels on riparian and wetland habitats, and (6) increases wetland establishment that would benefit long-term SONCC coho salmon watershed functioning. This Amendment also acknowledges that Permittee needs additional time to complete mitigation measures requiring permanent protection of HM Lands. Permittee's continued adherence to and implementation of the avoidance and minimization

measures set forth in the ITP's Conditions of Approval and MMRP, will minimize and fully mitigate impacts of the taking on the Covered Species.

None of the factors that would trigger the need for subsequent or supplemental environmental analysis of the Project under Public Resources Code section 21166 or California Code of Regulations, title 4, sections 15162 and 15163, exist as a result of this Amendment.

Discussion: CDFW issued the ITP in July 2010, as a responsible agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.) after, among other things, considering the Environmental Impact Report (EIR) and Supplemental EIR certified by Caltrans as the lead agency for the Project. As explained in the findings below, CDFW finds for purposes of CESA that this Amendment is a minor change to the Project as originally approved. CDFW finds for the same reasons under CEQA that approval of the Amendment will not result in and does not have the potential to create any new significant or substantially more severe environmental effects than previously analyzed and disclosed by Caltrans during its lead agency review of the Project, particularly with respect to the impacts authorized by CDFW pursuant to the ITP as amended. As a result, CDFW finds that no additional subsequent or supplemental environmental review is required by CEQA as part of CDFW's approval of this Amendment.

CDFW finds that this Amendment is a Minor Amendment, as defined in California Code of Regulations, title 14, section 783.6, subdivision (c)(4).

Discussion: This Minor Amendment modifies the ITP, as originally issued by CDFW, to provide administrative changes, minor changes to Conditions of Approval, updates to mitigation requirements, and timeframes for Project and mitigation completion. These changes to the ITP will not: (1) increase the level of take or other Project impacts on Covered Species previously analyzed and authorized by the ITP, (2) affect Permittee's substantive mitigation obligations under the ITP, (3) require further environmental review under CEQA, or (4) increase temporal impacts on the Covered Species. Therefore, this Amendment will not significantly modify the scope or nature of the permitted Project or activity, or the minimization, mitigation, or monitoring measures in the ITP. CDFW has determined that the change to the ITP constitutes a Minor Amendment as defined in California Code of Regulations, title 14, section 783.6, subdivision (c)(4).

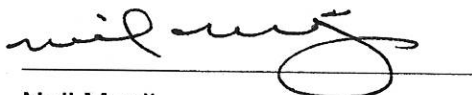
All terms and conditions of the ITP and MMRP as previously issued by CDFW that are not expressly amended herein shall remain in effect, and the Permittee shall implement and adhere to all such terms and conditions.

The authorization provided by this Amendment is not valid until Permittee signs and dates the acknowledgement below, and returns one of the duplicate originals of this Amendment by registered first class mail to CDFW at:

Department of Fish and Wildlife
Habitat Conservation Planning Branch
Attention: CESA Permitting Program
1416 Ninth Street, Suite 1260
Sacramento, California 95814

APPROVED BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

on 3/11/14



Neil Manji
Regional Manager
Northern Region

ACKNOWLEDGMENT

The undersigned: (1) warrants that he or she is acting as a duly authorized representative of the Permittee, (2) acknowledges receipt of the original ITP and this Amendment, and (3) agrees on behalf of the Permittee to comply with all terms and conditions of the ITP as amended.

By: _____ Date: _____

Printed Name: _____ Title: _____

Minor Amendment No. 1
Incidental Take Permit 2081-2010-007-01
CALIFORNIA DEPARTMENT OF TRANSPORTATION
Willits Bypass

STATE OF CALIFORNIA DEPARTMENT OF FISH AND GAME,
INCIDENTAL TAKE PERMIT NO. 2081-2010-007-01,
ATTACHMENT # 1 (REVISED MARCH 10, 2014)

Attachment 1
Revised March 10, 2014

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)
CALIFORNIA ENDANGERED SPECIES ACT

INCIDENTAL TAKE PERMIT NO. 2081-2010-007-01, *Amendment #1*

PERMITTEE: California Department of Transportation

PROJECT: Willits Bypass Project

PURPOSE OF THE MMRP

The purpose of the MMRP is to ensure that the impact minimization and mitigation measures required by the Department of Fish and **Wildlife (CDFW)** for the above-referenced Project are properly implemented, and thereby to ensure compliance with section 2081(b) of the Fish and Game Code and section 21081.6 of the Public Resources Code. A table summarizing the mitigation measures required by **CDFW** is attached. This table is a tool for use in monitoring and reporting on implementation of mitigation measures, but the descriptions in the table do not supersede the mitigation measures set forth in the California Incidental Take Permit (ITP) **including amendments, or** in attachments to the ITP, and the omission of a ITP requirement from the attached table does not relieve the Permittee of the obligation to ensure the requirement is performed.

OBLIGATIONS OF PERMITTEE

Mitigation measures must be implemented within the time periods indicated in the table that appears below. Permittee has the primary responsibility for monitoring compliance of all mitigation measures and for reporting to **CDFW** on the progress in implementing those measures. These monitoring and reporting requirements are set forth in the ITP itself and are summarized at the front of the attached table.

VERIFICATION OF COMPLIANCE, EFFECTIVENESS

CDFW may, at its sole discretion, verify compliance with any mitigation measure or independently assess the effectiveness of any mitigation measure.

TABLE OF MITIGATION MEASURES

The following items are identified for each mitigation measure: Mitigation Measure, Source, Implementation Schedule, Responsible Party, and Status/Date/Initials. The Mitigation Measure column summarizes the mitigation requirements of the ITP. The Source column identifies the ITP condition that sets forth the mitigation measure. The Implementation Schedule column shows the date or phase when each mitigation measure will be implemented. The Responsible Party column identifies the person or agency that is primarily responsible for implementing the mitigation measure. The Status/Date/Initials column shall be completed by the Permittee during preparation of each Status Report and the Final Mitigation Report, and must identify the implementation status of each mitigation measure, the date that status was determined, and the initials of the person determining the status.

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	GENERALLY BEFORE COVERED ACTIVITY CONSTRUCTION WORK DISTURBING SOIL OR VEGETATION				
1	Mitigation and Monitoring Proposal. The Permittee's April 2013 Draft MMP sets forth mitigation measures related to the Covered Species for CDFW review and approval. Prior to reinitiating Bypass construction work activities, the Permittee shall provide CDFW with a revised, Final MMP that meets CDFW's approval. CDFW will provide approval for the Final MMP in writing, and the Permittee shall adhere to the Final MMP approved by CDFW. The Final MMP shall include (1) a detailed description of the baseline condition of each parcel of habitat mitigation (HM) Lands acquired to offset impacts to the Covered Species, (2) a detailed description of the measures that will be used to restore and enhance the ecological functions of the HM Lands to offset impacts to Covered Species, including final design and planting details for habitat creation, revegetation, and enhancement actions, (3) a discussion of the parameters that will be monitored to determine changes in ecological functions, including the frequency of monitoring, methods that will be used, and criteria used to determine success related to Covered Species, (4) an adaptive management plan to be implemented in the event that expected results related to Covered species are not achieved, and (5) a long-term plan for managing and maintaining the HM lands after success criteria related to Covered Species have been met.	ITP Condition # 5.1	Prior to reinitiating Bypass construction work activities.	Permittee	
2	Designated Representative. Before initiating channel-, ground-, or vegetation-disturbing Project activities, Permittee shall notify CDFW in writing of the Designated Representative responsible for communications with CDFW and overseeing compliance with this ITP. The Permittee shall provide the Designated Representative's name, business address, and contact information, and shall notify CDFW in writing if a substitute Designated Representative is selected or identified at any time during the term of this ITP.	ITP Condition # 5.2	Before commencing channel- ground- or vegetation- disturbing activities – Entire Project	Permittee	
3	Designated Biologists. At least 30 days before initiating channel-, ground-, or vegetation-disturbing activities that may result in the incidental take of the Covered Species, the Permittee has submitted to CDFW in writing, for approval, the name, qualifications, business address, and contact information for biological monitors (Designated Biologists). Designated Biologists shall be knowledgeable and experienced in the biology and natural history of the Covered Species. The Designated Biologists shall be responsible for monitoring Project activities and/or channel-, ground-, or vegetation-disturbing activities in areas of Covered Species' habitat to help minimize or avoid the incidental take of individual Covered Species and to avoid or minimize disturbance of Covered Species' habitat.	ITP Condition # 5.3	At least 30 days before commencing ground- or vegetation- disturbing activities	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
4	<p><u>Education Program.</u> Permittee shall conduct an education program for all persons employed or otherwise working on the Project site prior to performing any work on-site. The program shall consist of a presentation from the Designated Biologist that includes a discussion of the biology and general behavior of the Covered Species, information about the distribution and habitat needs of the Covered Species, sensitivity of the Covered Species to human activities, its status under CESA including legal protection, recovery efforts, penalties for violations and Project-specific protective measures described in this ITP. Interpretation shall be provided for non-English speaking workers, and the same instruction shall be provided for any new workers prior to their performing work on-site. Copies of this ITP shall be maintained at the worksite. Permittee shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry on-site. Upon completion of the program, employees shall sign a form stating they attended the program and understand all protection measures. These forms shall be filed at the worksite offices and be available to DFG upon request.</p>	ITP Condition # 5.5	Before commencing channel-ground-disturbing activities - Entire Project	Permittee	
5	<p><u>Firearms and Dogs:</u> Permittee shall prohibit firearms and domestic dogs from the Project site and site access routes during Project activities and development of the Project, except those in the possession of authorized security personnel or local, State, or Federal law enforcement officials.</p>	ITP Condition # 5.6	Entire Project	Permittee	
6	<p><u>Delineation of Property Boundaries:</u> Before starting Covered Activities, Permittee shall clearly delineate right-of-way and/or property boundaries of the current Project work area or areas with fencing, stakes, or flags, and shall similarly delineate the limits of Project activities. Permittee shall restrict all project activities to within the fenced, staked or flagged areas. Permittee shall maintain all fencing, stakes and flags until the completion of Project activities in that area.</p>	ITP Condition # 5.7	Before commencing Covered Activities - Entire Project	Permittee	
7	<p><u>Delineation of Habitat:</u> Permittee shall clearly delineate habitat of the Covered Species on the Project site with posted signs, posting stakes, flags, and/or rope or cord, and place fencing as necessary to minimize the disturbance of Covered Species' habitat. Permittee shall designate Covered Species habitat adjacent to the work area as Environmentally Sensitive Areas (ESAs) on the construction plans and construction personnel and equipment shall not enter these areas. Permittee shall install ESA fencing prior to initiating construction activities. The location of all ESA fencing shall be inspected and approved by CDFW prior to Project construction activities involving vegetation removal or ground disturbance.</p>	ITP Condition # 5.8	Before commencing construction activities - Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
8	Notification Prior to Commencement. Permittee shall notify DFG 14 calendar days before initiating channel-, ground-, or vegetation-disturbing activities and shall document compliance with all pre-Project Conditions of Approval before initiating channel-, ground-, or vegetation-disturbing activities.	ITP Condition # 6.1	14 calendar days before commencing ground- or vegetation-disturbing activities	Permittee	
9	Grass Population Study. Prior to initiating vegetation- or ground-disturbing activities, Permittee shall fund a two-year study of North Coast semaphore grass populations in the Little Lake Valley with the goal of characterizing ecological requirements for the species. The study shall investigate the soils, hydrology, and associated species at sites occupied by North Coast semaphore grass and at adjacent, unoccupied sites to identify potentially suitable areas for plant establishment, guide future management of HM Lands and determine the potential for expanding current populations.	ITP Condition # 7.10	Before commencing ground- or vegetation-disturbing activities	Permittee	
10	Grass Seed Collection. Prior to initiating vegetation- or ground-disturbing activities, Permittee shall harvest mature North Coast semaphore grass seed from the area that will be directly impacted by construction. Seed shall be collected at the appropriate time of year by a botanist with a valid DFG scientific collection permit that covers the species, or a MOU with DFG authorizing seed collection for the Project. If the property is being grazed during the growing season prior to collection, Permittee shall install temporary fencing to exclude cattle from the population.	ITP Condition # 7.11	Before commencing ground- or vegetation-disturbing activities	Permittee	
11	Grass Curation and Propagation. Permittee shall sponsor the permanent curation of a portion of the collected seed by an organization participating in the Center for Plant Conservation's National Collection of Endangered Plants. Permittee shall contract with a qualified native plant nursery to propagate the remaining seed for outplanting as container stock within suitable, protected habitat adjacent to the impacted population.	ITP Condition # 7.12	Before commencing ground- or vegetation-disturbing activities	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
12	<p>HM Lands Acquisition and Management. Permittee has acquired approximately 1,795 acres of mitigation lands to mitigate for the Project's impacts. Of this total, Permittee shall permanently preserve and manage approximately 1,489 acres for the Covered Species, pursuant to the Final MMP. To fully mitigate for the incidental taking of SONCC coho salmon that will occur as a result of the temporary and permanent habitat loss and mortality of individuals related to other Project activities, Permittee shall manage approximately 1416 acres of HM Lands to establish 43.89 acres of Category I riparian habitat, rehabilitate 81.80 acres of Category I riparian habitat, and protect and preserve 5.42 acres of existing Category I riparian habitat. In addition, to fully mitigate for the incidental taking of North Coast semaphore grass, Permittee shall restore, and permanently preserve four extant populations of North Coast semaphore grass totaling 5.09 acres, and establish 2.97 acres on approximately 73 acres of HM Lands. Permittee shall prepare a restoration and management plan for the North Coast semaphore grass and submit the plan to CDFW for approval no later than July 1, 2015. The plan shall specify vegetation management actions and enhancement measures designed to result in a net expansion of existing North Coast semaphore grass populations on the HM Lands. The Permittee shall provide CDFW with a revised restoration and management plan for the North Coast semaphore grass that meets CDFW's approval no later than 60 days after receiving CDFW comments on the draft document. CDFW will provide approval for the revised restoration and management plan for the North Coast Semaphore grass in writing. As part of this condition, Permittee shall do all of the following:</p>	<p>ITP Condition # 8.4</p>	<p>NLT July 1, 2015; NLT 60 days after receiving CDFW comments</p>	<p>Permittee</p>	
13	<p>Transfer of Possession of Conservation Easement. Within 24 months of the effective date of this ITP Amendment, Permittee shall provide for the permanent protection of the off-site HM Lands by recording one or more Transfers of Possession (formerly Intrastate Agreement for Transfer of Control of Possession) of a conservation easement interest in the HM Lands in favor of CDFW or by recording one or more conservation easements encumbering the HM Lands in favor of a non-State entity approved by CDFW. CDFW must approve the form and substance of each Transfer of Possession or conservation easement and may require a separate Transfer of Possession or conservation easement for each legal parcel comprising the HM Lands.</p>	<p>ITP Condition # 8.4.1</p>	<p>Within 24 months of effective date of ITP Amendment</p>	<p>Permittee</p>	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
14	<p>Conservation Easement and Fee Title Transfer. In addition, Permittee shall provide for the permanent protection of the off-site HM Lands by transferring fee title to the properties to an entity approved by CDFW under terms approved by CDFW as described below subject to the conservation easement over the transferred HM Lands in favor of CDFW or another entity approved by CDFW. CDFW must approve the form and substance of each deed and reservation of conservation easement. Permittee shall transfer fee title with reservation of conservation easement according to the requirements of Conditions 8.4.1 and 8.4.2 within 12 months after all mitigation success criteria for a particular legal parcel or parcels have been met or at such time as CDFW may approve. CDFW, in its sole discretion, may authorize a governmental entity, special district, non-profit organization, for-profit entity, person, or another entity to hold title to and manage the property provided that the district, organization, entity, or person meets the requirements of Government Code sections 65965-65968, as amended. If CDFW does not hold fee title to the HM lands, CDFW shall act as grantee for a conservation easement over the HM lands or shall, in its sole discretion, approve a non-profit entity, public agency, or Native American tribe to act as grantee for a conservation easement over the HM lands provided that the entity, agency, or tribe meets the requirements of Civil Code section 815.3. If CDFW does not hold the conservation easement, CDFW shall be expressly named in the conservation easement as a third-party beneficiary. The Permittee shall obtain CDFW written approval of any conservation easement before its execution or recordation. No conservation easement shall be approved by CDFW unless it complies with Government Code sections 65965-65968, as amended and includes provisions expressly addressing Government Code sections 65966(j) and 65967(e).</p>	<p>ITP Condition # 8.4.2</p>	<p>Within 12 months after meeting all mitigation success criteria for legal parcel(s)</p>	<p>Permittee</p>	
15	<p>Conveyance Documents. Permittee shall provide a recent preliminary title report, initial hazardous materials survey report, and other necessary documents specified in Attachment 2 and/or requested by the CDFW Regional Representative. The Permittee shall be responsible for all costs associated with obtaining and providing the required documents. All documents conveying the HM Lands and all conditions of title are subject to the approval of CDFW, the Wildlife Conservation Board and if applicable, the Department of General Services;</p>	<p>ITP Condition # 8.4.3</p>	<p>Within 24 months of date of ITP Amendment</p>	<p>Permittee</p>	

16	<p><u>Land Manager.</u> Permittee shall designate both an interim and long-term land manager approved by CDFW. The interim and long-term land managers may, but need not, be the same. The interim and/or long-term land managers shall identify both the interim and long-term land managers. Permittee shall notify CDFW of any subsequent changes in the land manager within 30 days of the change. If CDFW will hold fee title to the mitigation land, CDFW will also act as both the interim and long-term land manager unless otherwise specified.</p>	ITP Condition # 8.4.4	Within 24 months of date of ITP Amendment	Permittee	
17	<p><u>Interim Management (Initial and Capital).</u> Permittee shall provide for the interim management of the HM lands including start-up and initial site protection and enhancement. The Permittee shall implement the start-up and interim management of the HM lands as described in the Final MMP and conservation easement approved by CDFW. Start-up activities include, at a minimum: (1) preparing a Final MMP for CDFW approval; (2) conducting a baseline biological assessment and land survey report within four months of recording or transfer; (3) developing and transferring Geographic Information Systems (GIS) data if applicable; (4) establishing initial fencing; (5) conducting litter removal; (6) conducting initial habitat restoration or enhancement, if applicable; and (7) installing signage. The interim management period shall be a minimum of five years from the date of HM land acquisition and protection and full funding of the Endowment and includes expected management following start-up activities. Unless otherwise approved by CDFW, the interim management period for any portion of the HM Lands shall only end upon that portion of land's transfer of title for permanent protection as described in Conditions 8.4.1 and 8.4.2 above. Interim management period activities described in the Final MMP shall include fence repair, continuing trash removal, site monitoring, vegetation and invasive species management, and maintenance of all parcels following meeting success criteria until such time as property is transferred to the long-term land manager. Permittee shall either (1) provide a security to CDFW for the minimum of five years of interim management that the land owner, Permittee, or interim land manager agrees to manage and pay for at their own expense, (2) establish an escrow account with written instructions approved in advance in writing by CDFW to pay the interim land manager annually in advance, or (3) establish a short-term enhancement account with CDFW or a CDFW-approved entity for payment to the interim land manager. The interim management costs of the 1416 acres of mitigation lands for SONCC coho salmon, as well as the 73 acres of mitigation lands for North Coast semaphore grass, are subsets of the interim management costs for the entire 1,795-acre HM Lands. CDFW estimates the total interim management costs for Covered Species on the HM Lands to be approximately \$6,985,265: (1) \$4,590.40/acre for 1,416 acres for SONCC coho salmon, totaling approximately \$6,500,000; and (2) \$6,647.45/acre for 73 acres for North Coast semaphore grass, totaling approximately \$485,265.</p>	ITP Condition # 8.4.5	Within 24 months of date of ITP Amendment	Permittee	

18	<p><u>Endowment Fund.</u> The Permittee shall ensure that the HM lands are sufficiently funded for perpetual management, maintenance, and monitoring by the long-term land manager as described in this ITP Amendment, the conservation easement, and the final MMP approved by CDFW. Permittee shall provide long-term management funding for the perpetual management of the HM Lands by establishing a long-term management fund (Endowment). The Endowment is a sum of money, held in a CDFW-approved fund that provides funds for the perpetual management, maintenance, monitoring, and other activities on the HM Lands consistent with the Final State MMP required by Condition of Approval 5.1. Endowment as used in this ITP shall refer to the endowment deposit and all interest, dividends, other earnings, additions and appreciation thereon. The Endowment shall be governed by this ITP, Government Code sections 65965-65968, as amended, and Probate Code sections 18501-18510, as amended.</p> <p>After the interim management period, the designated long-term land manager shall implement the management and monitoring of the HM Lands according to the Final MMP. The long-term land manager shall be obligated to manage and monitor the HM lands in perpetuity to preserve their conservation values in accordance with this ITP, the conservation easement, and the Final MMP. Such activities shall be funded through the Endowment.</p>	ITP Condition # 8.4.6	Within 24 months of date of ITP Amendment	Permittee	
19	<p><u>Identify an Endowment Manager.</u> The Endowment shall be held by the Endowment Manager, which shall be either CDFW or another entity qualified pursuant to Government Code sections 65965-65968, as amended. Permittee shall submit to CDFW a written proposal that includes: (i) the name of the proposed Endowment Manager; (ii) whether the proposed Endowment Manager is a governmental entity, special district, nonprofit organization, community foundation, or congressionally chartered foundation; (iii) whether the proposed Endowment Manager holds the property or an interest in the property for conservation purposes as required by Government Code section 65968(b)(1) or, in the alternative, the basis for finding that the Project qualifies for an exception pursuant to Government Code section 65968(b)(2); and (iv) a copy of the proposed Endowment Manager's certification pursuant to Government Code section 65968(e). Within thirty days of CDFW's receipt of Permittee's written proposal, CDFW shall inform Permittee in writing if it determines the proposal does not satisfy the requirements of Fish and Game Code section 2081(b)(4) and, if so, shall provide Permittee with a written explanation of the reasons for its determination. If CDFW does not provide Permittee with a written determination within the thirty-day period, the proposal shall be deemed consistent with Section 2081(b)(4).;</p>	ITP Condition # 8.4.6.1	Within 24 months of date of ITP Amendment	Permittee	

20	<p>8.4.6.2. Calculate the Endowment Funds Deposit. After obtaining CDFW written approval of the HM lands, long-term management plan, and Endowment Manager, Permittee shall prepare a Property Analysis Record (PAR) [or PAR-equivalent analysis (hereinafter "PAR")] to calculate the amount of funding necessary to ensure the long-term management of the HM lands (Endowment Deposit Amount). The Permittee shall submit to CDFW for review and approval the results of the PAR before transferring funds to the Endowment Manager.</p> <p>8.4.6.2.1. Capitalization Rate and Fees. Permittee shall obtain the capitalization rate from the selected Endowment Manager for use in calculating the PAR and adjust for any additional administrative, periodic, or annual fees.</p> <p>8.4.6.2.2. Endowment Buffers/Assumptions. Permittee shall include in PAR assumptions the following buffers for endowment establishment and use that will substantially ensure long-term viability and security of the Endowment:</p> <p>8.4.6.2.2.1. 10 Percent Contingency. A 10 percent contingency shall be added to each endowment calculation to hedge against underestimation of the fund, unanticipated expenditures, inflation, or catastrophic events.</p> <p>8.4.6.2.2.2. Three Years Delayed Spending. The endowment shall be established assuming spending will not occur for the first three years after full funding.</p> <p>8.4.6.2.2.3. Non-annualized Expenses. For all large capital expenses to occur periodically but not annually such as fence replacement or well replacement, payments shall be withheld from the annual disbursement until the year of anticipated need or upon request to Endowment Manager and CDFW.</p>	ITP Condition # 8.4.6.2; 8.4.6.2.1; 8.4.6.2.2; 8.4.6.2.2.1; 8.4.6.2.2.2; 8.4.6.2.2.3	After CDFW approval of State MMP and Endowment Manager;	Permittee	
21	<p>Transfer Long-term Endowment Funds. Permittee shall transfer the long-term endowment funds to the Endowment Manager upon CDFW approval of the Endowment Deposit Amount identified above. The approved Endowment Manager may pool the Endowment with other endowments for the operation, management, and protection of HM lands for local populations of the Covered Species but shall maintain separate accounting for each Endowment. The Endowment Manager shall, at all times, hold and manage the Endowment in compliance with this ITP, Government Code sections 65965-65968, as amended, and Probate Code sections 18501-18510, as amended.</p>	ITP Condition # 8.4.6.3	Upon CDFW approval of Endowment deposit amount	Permittee	
22	<p>Reimburse CDFW. Permittee shall reimburse CDFW for all reasonable expenses incurred by CDFW such as transaction fees, account set-up fees, administrative fees, title and documentation review and related title transactions, expenses incurred from other state agency reviews, and overhead related to transfer of HM lands to CDFW.</p>	ITP Condition # 8.4.7	Upon transfer of HM lands	Permittee	

23	<p><u>Funding Assurance.</u> Permittee may proceed with channel-, ground-, or vegetation-disturbing activities before completing all of the mitigation, monitoring and reporting activities required in the Conditions of Approval of this ITP only if Permittee ensures funding to complete those activities by providing to CDFW, prior to re-commencing Bypass construction-related activities or within 30 days after the effective date of this ITP Amendment, written documentation that the Permittee has allocated sufficient funds, acceptable to and approved by CDFW, for the Project to ensure implementation of the Conditions of Approval of this ITP.</p> <p>The written documentation shall identify and display in itemized form, at a minimum, the following estimated costs of implementing the ITP's requirements, which total approximately \$35,623,690, and which include but are not limited to the ITP's mitigation, monitoring and reporting requirements for Covered Species. The written documentation submitted by the Permittee to satisfy this Condition shall be on Caltrans letterhead and signed by both the District Deputy Director of Project Management and the District Deputy Director of Environment, and shall include a statement that the funds identified have been allocated specifically for the purpose of fulfilling the Permittee's mitigation obligations associated with this ITP and will not be redirected for other Project purposes.</p> <p>Even if the Funding Assurance is provided, Permittee must complete the required acquisition, protection, and transfer of all HM Lands and record the required conservation easements pursuant to Condition 8.4.</p>	ITP Condition # 9.1	Prior to re-initiating Bypass construction-related activities or within 30 days after effective date of Amendment	Permittee	
DURING CONSTRUCTION					
24	<p>Designated Biologist Authority. To ensure compliance with the Conditions of Approval of this ITP, the Designated Biologists shall have authority to immediately report to CDFW any activity that is not in compliance with this ITP, and/or to immediately recommend any reasonable measures to a Permittee representative that has the authority to issue a stop work order to avoid the unauthorized take of an individual of the Covered Species. Neither the Designated Biologist nor CDFW shall be liable for any costs incurred in complying with the Conditions of Approval, including cease-work orders issued by CDFW.</p>	ITP Condition # 5.4	Entire Project; immediately as needed	Permittee	
25	<p>Project Site Access. Project-related personnel shall access the Project site during Project activities using existing designated routes and shall not cross Covered Species' habitat outside of or en route to the Project site. Project-related vehicle traffic shall be restricted to established roads, staging, and parking areas. If Permittee determines construction of off-site routes for travel are necessary, Permittee shall contact CDFW prior to carrying out such an activity. Construction of off-site routes for travel may require an amendment to this ITP if take of Covered Species incidental to such construction may occur.</p>	ITP Condition # 5.9	Entire Project	Permittee	

26	Staging Areas. Permittee shall confine all Project-related parking, storage areas, laydown sites, equipment storage, and any other surface-disturbing activities to the Project site using, to the extent possible, previously disturbed areas. Additionally, Permittee shall not use or cross Covered Species' habitat outside of the marked Project boundaries unless specifically provided for in Condition 5.9 of this ITP. Staging of construction materials and equipment shall not occur within the regulatory floodway.	ITP Condition # 5.10	Entire Project	Permittee	
27	Flood Events. Permittee shall design and construct temporary bridges and other structures in the channel or as part of other mitigation activities to pass the 100-year flood event. Permittee shall remove structures and materials not designed to withstand high flows from the channel prior to October 15.	ITP Condition # 5.11	Entire Project; Prior to October 15	Permittee	
28	Hazardous Waste. Permittee shall immediately stop/repair and clean up any leaks or spills of fuel, lubricants, or other materials that may be deleterious to fish, plant, or wildlife during Project activities at the time of occurrence. Permittee shall confine the storage and handling of hazardous materials to designated staging and refueling areas and shall properly contain and dispose of any unused or leftover hazardous products off-site.	ITP Condition # 5.12	Entire Project; At time of occurrence	Permittee	
29	Vehicle Inspection. Permittee shall ensure that vehicles and equipment operated within or adjacent to the stream channel are free of dirt, debris, noxious weeds and other harmful pests, and oil or petroleum residues and are inspected and maintained on a daily basis to prevent leaks of materials that could be deleterious to aquatic life, wildlife, or riparian vegetation. Vehicles and equipment that may contain dirt, debris, noxious weeds, or other harmful pests shall be appropriately cleaned to remove these contaminants prior to arriving at the Project site.	ITP Condition # 5.13	Entire Project; Daily	Permittee	
30	CDFW Access. Permittee shall provide CDFW staff with reasonable access to the Project site and mitigation lands under Permittee control, and shall otherwise fully cooperate with CDFW efforts to verify compliance with or effectiveness of mitigation measures set forth in the ITP.	ITP Condition # 5.14	Entire Project	Permittee	
31	Refuse Removal. Upon completion of Project activities, and prior to October 31 each year , Permittee shall remove from the Project site and properly dispose of all temporary fill and construction refuse, including, but not limited to, broken equipment parts, wrapping material, cords, cables, wire, rope, strapping, twine, buckets, metal or plastic containers, and boxes.	ITP Condition # 5.15	Prior to October 31 each year; Upon completion of project activities	Permittee	
32	Notification of Non-compliance. Permittee shall immediately notify DFG in writing if it determines that it is not in compliance with any Condition of Approval of this ITP, including, but not limited to, any actual or anticipated failure to implement mitigation measures within the time periods indicated in this ITP and/or the MMRP. Permittee shall report any non-compliance with the ITP during Project activities to DFG within 24 hours.	ITP Condition # 6.2	Entire Project; Immediately within 24 hours	Permittee	

33	<p>Compliance Monitoring. A Designated Biologist shall be on-site daily while Project activities, including all pile installation, dewatering, channel-, vegetation-, or ground-disturbing activities, that may affect Covered Species are taking place to: (1) minimize incidental take of the Covered Species; (2) check for compliance with all mitigation and avoidance measures; (3) check all exclusion zones; and (4) ensure that signs, stakes, and fencing are intact, and that human activities are restricted outside of these protective zones. A Designated Biologist shall prepare daily written observation and inspection records summarizing: disturbance activities observed, oversight activities and compliance inspections, observations of Covered Species, survey results, and monitoring activities required by this ITP. The daily written observation and inspection report summaries shall be submitted to CDFW on a weekly basis while Project activities are taking place. A Designated Biologist shall conduct compliance inspections a minimum of once per month during periods of inactivity and after clearing, grubbing, and grading are completed. During periods of inactivity, compliance inspection report summaries shall be submitted to CDFW on at least a monthly basis.</p>	ITP Condition # 6.3	Entire Project; Daily, weekly, monthly	Permittee	
34	<p>Quarterly Compliance Report. Permittee shall compile the observation and inspection records identified in Condition 6.3 into a Quarterly Compliance Report and submit it to CDFW along with a copy of the MMRP table with notes showing the current implementation status of each mitigation measure. Quarterly Compliance Reports shall be submitted to Regional Office at the office listed in the Notices section of this ITP or via e-mail to DFG's Regional Representative. At the time of this ITP's amendment, the CDFW Regional Representative is Staff Environmental Scientist, JoAnn Dunn (email address: joann.dunn@wildlife.ca.gov). CDFW may at any time increase the timing and number of compliance inspections and reports required under this provision depending upon the results of previous compliance inspections. If CDFW determines the reporting schedule is inadequate, CDFW will notify Permittee by letter of the new reporting schedule.</p>	ITP Condition # 6.4	Entire Project; Quarterly: April, July, October, January	Permittee	
35	<p>Annual Status Report. Permittee shall provide DFG with an Annual Status Report (ASR) no later than January 31 of every year beginning with issuance of the ITP and continuing until CDFW accepts the Final Mitigation Report identified below. Each ASR shall include, at a minimum: (1) a summary of all Quarterly Compliance Reports identified in Condition 6.4, (2) a general description of the status of the Project site and Project activities, including actual or projected completion dates, if known; (3) a copy of the table in the MMRP with notes showing the current implementation status of each mitigation measure; and (4) an assessment of the effectiveness of each completed or partially completed mitigation measure in minimizing and mitigating Project impacts on the Covered Species.</p>	ITP Condition # 6.5	Entire Project; January 31 each year	Permittee	

36	Notification of Species Mortality. If take¹ of SONCC coho salmon occurs during a Project-related activity, or if any SONCC coho salmon are otherwise found dead within the Project site, Permittee or Designated Biologist shall immediately provide initial notification to CDFW's Regional Representative. The initial notification to CDFW shall include information regarding the location, species, number of animals killed or otherwise taken, and the ITP Number. Following initial notification, Permittee shall send CDFW a written report within 2 calendar days. The report shall include the date and time of the finding or incident, location of the carcass, and, if possible, provide a photograph, explanation as to cause of death, and any other pertinent information.	ITP Condition # 6.7	Entire Project; Immediately as needed; Within 2 calendar days	Permittee	
37	Work in Streams and Removal of Riparian Vegetation. Except for removal of aboveground portions of riparian vegetation, Permittee shall confine all construction work within the bed, channel, or banks of any stream to the period of June 15 through October 15. If the stream is dry or discontinuous, and/or advance written approval is obtained from CDFW, then Permittee may conduct work outside of the June 15 through October 15 construction window.	ITP Condition # 7.1	Entire Project; June 15 – October 15	Permittee	
38	Pile Driving. Permittee shall confine all pile driving activities, including installation of sheet piles, temporary and permanent piles located within the channel or below the top of bank, to the period between June 15 through October 15. Permittee shall also confine installation of permanent bridge or viaduct piles within 50 feet of the channel to the period between June 15 through October 15. Contingent on the results of hydroacoustic monitoring, the Permittee may install permanent bridge or viaduct piles within 50 feet of the channel outside this work window provided a written request is made to DFG. Written approval from DFG for the work window variance must be received by the Permittee prior to the start or continuation of work outside the June 15 through October 15 work window.	ITP Condition # 7.3	Entire Project; June 15 – Oct 15	Permittee	
39	Hydroacoustic Monitoring. If surface water is present within the channel, Permittee shall conduct hydroacoustic monitoring to document peak sound pressure levels and cumulative sound exposure levels during all permanent pile-driving activities in the channel or within 50 feet of the channel. Permittee shall also monitor the driving of temporary trestle and falsework piles below the top of bank. Permittee has submitted a Hydroacoustic Monitoring Plan that has been reviewed and approved by CDFW. If underwater sound pressure levels for each pile type and size do not vary to a large degree, the Permittee may request written approval from CDFW to discontinue hydroacoustic monitoring.	ITP Condition # 7.4	Entire Project	Permittee	
40	Coffer Dams. Permittee shall contain permanent pile driving activities in the stream channel within coffer dams. A bubble curtain or other approved attenuation device shall be used to reduce sound exposure levels.	ITP Condition # 7.5	Entire Project	Permittee	

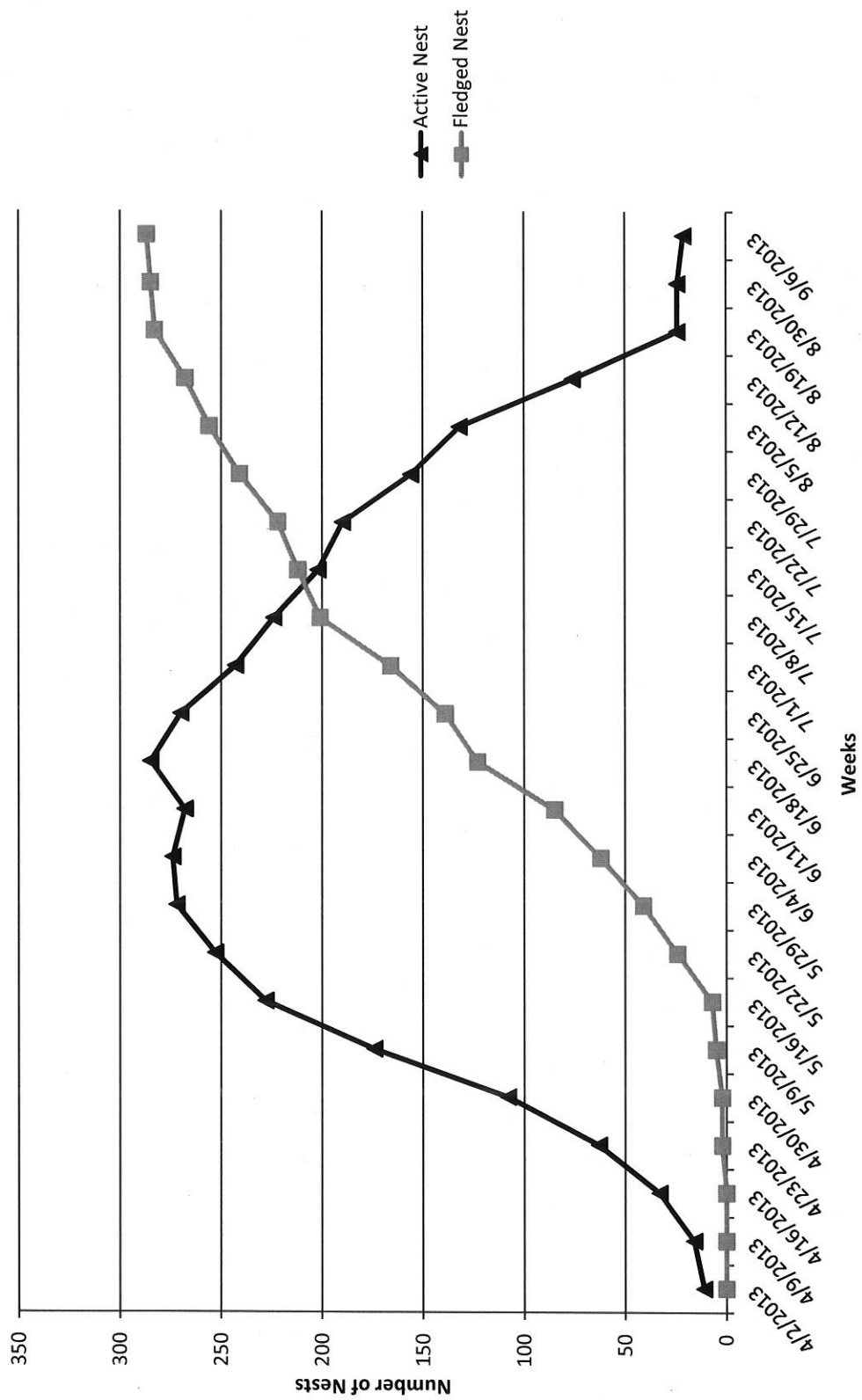
¹ Pursuant to Fish and Game Code section 86, "Take" means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." See also *Environmental Protection Information Center v. California Department of Forestry and Fire Protection* (2008) 44 Cal.4th 459, 507 (for purposes of incidental take permitting under Fish and Game Code section 2081, subdivision (b), "take" ... means to catch, capture or kill").

41	<p><u>Fish Capture.</u> Prior to conducting temporary or permanent pile driving activities within the channel, or within 50 feet of the channel, Permittee shall exclude, remove and relocate fish from coffer dams and those portions of the stream where cumulative sound exposure levels (SELCumulative) are predicted to exceed the interim injury criteria of 183 dB. Permittee shall use one or more of the following NMFS-approved methods to capture SONCC coho and other salmonids: dip net, seine, throw net, or electrofishing.</p>	ITP Condition # 7.6	Entire Project	Permittee	
42	<p><u>Stream Dewatering.</u> If dewatering is required, Permittee shall incrementally divert flows in the affected reach to facilitate fish capture and relocation. Flows shall be reduced over a minimum 4-hour period in the following increments: 50%, 75%, 90%, and 100%.</p>	ITP Condition # 7.7	Entire Project	Permittee	
43	<p><u>Fish Relocation.</u> Fish relocation activities shall be overseen by the Designated Biologist and shall be conducted by qualified fisheries biologists that are authorized by NMFS and DFG to handle listed salmonids. Captured fish shall be segregated by size to minimize predation, and maintained in cool, well-oxygenated water until released to suitable habitat outside the construction impact area.</p>	ITP Condition # 7.8	Entire Project	Permittee	
44	<p><u>Fish Passage.</u> Permittee shall ensure that installation of permanent culverts, bridges, grade control structures, instream habitat enhancement features, bank erosion control actions, and other channel modifications do not impede the passage of fish up or down stream. Permittee shall submit detailed designs for work within the stream channel to CDFW for review and approval at least 60 days prior to proposed work.</p>	ITP Condition # 7.9	At least 60 days prior to proposed work	Permittee	
45	<p><u>Grass Relocation.</u> Permittee shall salvage mature North Coast semaphore grass plants and/or rhizomes from the permanent impact area and relocate them to suitable, protected habitat adjacent to the impact area. Plants and/or rhizomes shall be transplanted by a qualified botanist in the late fall or early winter after soils have been moistened by the first seasonal rains. Permittee shall monitor the transplants, container stock, and adjacent natural plants within the population for a minimum period of 10 years following planting.</p>	ITP Condition # 7.13	Fall and early winter prior to construction	Permittee	
46	<p><u>Surface Hydrology.</u> Permittee shall maintain the existing surface hydrology of the remaining North Coast semaphore grass population within the Project right-of-way to the greatest extent possible by (1) installing two culverts to convey surface flows through the roadway embankment and (2) capturing roadway runoff and preventing it from discharging into adjacent occupied habitat.</p>	ITP Condition # 7.14	Entire Project	Permittee	
47	<p><u>Grass Population Protection.</u> Permittee shall provide for the long-term protection of the remaining population of North Coast semaphore grass within the Project right-of-way and shall add the location to the current database of Environmentally Sensitive Areas (ESAs) in Caltrans District 1. ESA paddles will be installed within the right-of-way to alert maintenance personnel and protect the population from inadvertent disturbance.</p>	ITP Condition # 7.15	Entire Project	Permittee	

48	Grass Population Maintenance. In consultation with CDFW and a qualified botanist, Permittee shall develop a maintenance prescription for the right-of-way that is compatible with the ecological requirements of North Coast semaphore grass no later than December 31, 2015 . The prescription shall specify mowing schedules and restrict incompatible activities such as blading or herbicide application. Permittee shall ensure that local maintenance personnel understand and implement the management prescription for this section of right-of-way.	ITP Condition # 7.16	No later than December 31, 2015	Permittee	
49	Fish Barrier Removal Plan. In consultation with CDFW , Permittee shall prepare draft and final designs for a project to remediate existing barriers to fish passage at the South Fork (PM 52.25) and North Fork (PM 52.36) Ryan Creek culverts on U.S. 101. Draft design plans for both crossings have been submitted to CDFW for review by December 31, 2013 . Final design plans shall be prepared and submitted to CDFW for approval no later than July 1, 2014 .	ITP Condition # 8.1	No later than December 31, 2013; No later than July 1, 2014	Permittee	
50	Fish Barrier Removal Completion. Permittee shall complete construction of the North Fork and South Fork Ryan Creek culvert remediation project no later than October 31, 2018.	ITP Condition # 8.2	No later than October 31, 2018	Permittee	
51	Fish Barrier Removal Funding. Permittee shall prepare cost estimates for the Ryan Creek passage improvement work on the North and South Fork Ryan Creek culvert crossings based on designs prepared under Condition 8.1 above, and shall apply for State Transportation Improvement Program funding in fiscal year 2015-2016 to complete this work in a timely manner at both locations .	ITP Condition # 8.3	No later than FY 2015-2016	Permittee	
POST-CONSTRUCTION					
52	Final Mitigation Report. No later than 60 days after completion of the Project, including completion of all mitigation measures, Permittee shall provide DFG with a Final Mitigation Report. The Final Mitigation Report shall be prepared by the Designated Biologist and shall include, at a minimum: (1) a summary of all Monthly/Quarterly Compliance Reports and all ASRs, (2) a copy of the table in the MMRP with notes showing when each of the mitigation measures was implemented; (3) all available information about Project-related incidental take of the Covered Species; (4) information about other Project impacts on the Covered Species; (5) dates of Project activities; (6) an assessment of the effectiveness of the ITP's Conditions of Approval in minimizing and fully mitigating Project impacts of the taking on Covered Species; (7) recommendations on how mitigation measures might be changed to more effectively minimize take and mitigate the impacts of future projects on the Covered Species; and (8) any other pertinent information.	ITP Condition # 6.6	No later than 60 days after completion of all mitigation measures	Permittee	

2013 BIRD NESTING ACTIVITIES IN LITTLE LAKE VALLEY GRAPH

2013 bird nesting activity along Willits Bypass Project Alignment - Information Only




OPTIONAL DISPOSAL SITE LOCATION MAP (MGS PLASMA)

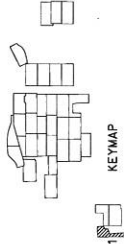
CONTRACT No.	01-262054
PROJECT ID	0115000013
1	PROJECT NUMBER & PHASE 0115000013

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION		03-LANDSCAPE ARCHITECTURE		T. CHRIS JOHNSON		CHECKED BY		D. BREWER		DATE REVISED	
SENIOR LANDSCAPE ARCHITECT		J. PIETRAZAK		DESIGNED BY		J. PIETRAZAK		REVISOR			

NOTES:
1. DISPOSAL SOIL FROM GRADING OPERATIONS IS TO BE PLACED AT THE DIRECTION OF THE ENGINEER.



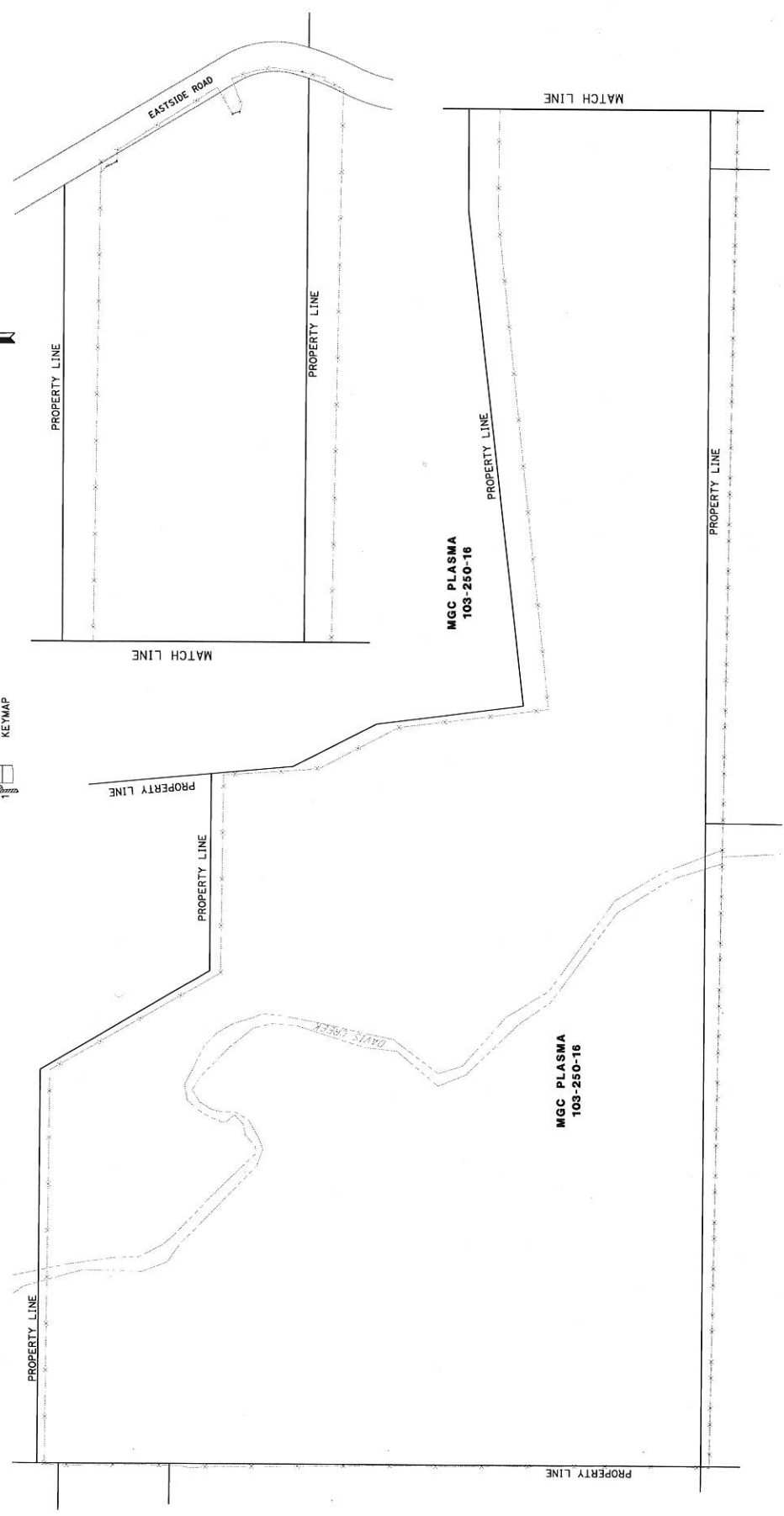
WILLITS
T18N R13W MDB&M
SEC 21



KEYMAP

Dist	COUNTY	ROUTE	POST MILES	SHEET TOTAL
01	Men	101	45.0/50.8	2 2


J. PIETRAZAK
 LICENSED LANDSCAPE ARCHITECT
 9/18/14
 PLANS APPROVAL DATE
 I, J. PIETRAZAK, A LICENSED LANDSCAPE ARCHITECT, HEREBY CERTIFY THAT THE INFORMATION CONTAINED ON THESE PLANS IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.
 I AM NOT PROVIDING ANY GUARANTEE OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, FOR THE USE OF THESE PLANS.



DISPOSAL SITE
SCALE: 1"=100'
DISP-1

WEED MANAGEMENT HANDOUTS:

- **WILLITS BYPASS-INVASIVE PLANT SPECIES
MASTER LIST FOR MITIGATION LANDS**

WILLITS BYPASS - INVASIVE PLANT SPECIES MASTER LIST for Joint-jurisdiction Mitigation Lands.

Species Subject to Invasive Species Performance Criteria are identified in **BOLD**.

(Sources: Table D-1 Baseline Vegetation Monitoring Results, August 2013 (Federal list) and Table 8.1 of June 2014 MMP (State list)).

Cal-IPC: The Inventory Database Scientific Name	Common Name	CAL-IPC Rating	Wetland Indicator Status	Habitats of Concern and Comments	Subject to Invasive Species Performance Criteria
<i>Aegilops geniculata</i>	Ovate goatgrass				YES, Federal ¹
<i>Aegilops</i> spp.	Goatgrass				YES, Federal
<i>Aegilops triuncialis</i>	Barb goatgrass	High	UPL	Grassland, oak woodland; spreading in NW and in Central Valley.	YES, Federal and State ²
<i>Agrostis stolonifera</i>	Creeping bentgrass	Limited	NI	Wetlands, riparian; grown for domestic forage. Limited distribution and impacts unknown.	-
<i>Ailanthus altissima</i>	Tree-of-heaven	Moderate	UPL	Riparian areas, grasslands, oak woodland. Impacts highest in riparian areas.	YES, State
<i>Anthoxanthum odoratum</i>	Sweet vernal grass	Moderate			-
<i>Arundo donax</i>	Giant reed	High	NI	Riparian areas, commercially grown for musical instrument reeds, structural material, etc.	YES, Federal and State
<i>Asparagus asparagoides</i>	Bridal creeper	Moderate	UPL	Riparian woodland.	-
<i>Avena barbata</i>	Slender wild oat	Moderate	UPL	Coastal scrub, grasslands, oak woodland, forest. Very widespread, but impacts more severe in desert regions.	-
<i>Avena fatua</i>	Wild oat	Moderate	UPL	Coastal scrub, chaparral, grasslands, woodland, forest. Very widespread, but impacts more severe in desert regions.	-

¹ Federal invasive species performance criteria = <2% absolute total cover of invasives.

² State invasive species performance criteria = <10% absolute total cover of invasives and no increase over baseline.

Cal-IPC: The Inventory Database Scientific Name	Common Name	CAL-IPC Rating	Wetland Indicator Status	Habitats of Concern and Comments	Subject to Invasive Species Performance Criteria
<i>Brachypodium distachyon</i>	Annual false brome	Moderate			-
<i>Brassica nigra</i>	Black mustard	Moderate	UPL	Widespread. Primarily a weed of disturbed sites, but can be locally a more significant problem in wildlands.	YES, Federal and State
<i>Brassica rapa</i>	Common mustard	Limited			YES, Federal and State
<i>Briza maxima</i>	Big quackinggrass, rattlesnakegrass	Limited	UPL	Grasslands. Widespread in Coast Range. Impacts generally minor, but locally can be higher.	-
<i>Bromus diandrus</i>	Ripgut brome	Moderate	UPL	Dunes, scrub, grassland, woodland, forest. Very widespread, but monotypic stands uncommon.	YES, Federal
<i>Bromus hordeaceus</i>	Soft brome	Limited	UPL	Grasslands, sagebrush, serpentine soils, many other habitats. Very widespread, but primarily in converted annual grasslands.	-
<i>Bromus madritensis</i> ssp. <i>rubens</i>	Red brome	High	NI	Scrub, grassland, desert washes, woodlands.	-
<i>Bromus tectorum</i>	Downy brome, cheatgrass	High	UPL	Interior scrub, woodlands, grasslands, piñon/Joshua tree woodland, chaparral.	YES, State
<i>Carduus pycnocephalus</i>	Italian thistle	Moderate	UPL	Forest, scrub, grasslands, woodland. Very widespread. Impacts may be variable regionally.	YES, Federal
<i>Carduus</i> spp.	Plumeless thistle				YES, Federal
<i>Carthamus lanatus</i>	Distaff thistle				YES, Federal
<i>Centaurea calcitrapa</i>	Purple star thistle				YES, Federal

Cal-IPC: The Inventory Database Scientific Name	Common Name	CAL-IPC Rating	Wetland Indicator Status	Habitats of Concern and Comments	Subject to Invasive Species Performance Criteria
<i>Centaurea jacea</i> subsp. <i>pratensis</i>	Meadow knapweed				YES, Federal
<i>Centaurea maculosa</i>	Spotted knapweed	High		Riparian, grasslands, wet meadows, forests. More widely distributed in other western states.	YES, Federal and State
<i>Centaurea melitensis</i>	Malta starthistle, tocalote	Moderate	UPL	Grasslands, oak woodland; sometimes misidentified as <i>C. solstitialis</i> . Impacts vary regionally.	YES, Federal and State
<i>Centaurea solstitialis</i>	Yellow starthistle	High	UPL	Grasslands, woodlands, occasionally riparian.	YES, Federal and State
<i>Centaurea</i> spp.	Starthistle, knapweeds				YES, Federal
<i>Centaurea stoebe</i> ssp. <i>micranthos</i>	Spotted knapweed				YES, Federal
<i>Chondrilla juncea</i>	Rush skeletonweed	Moderate	UPL	Grasslands. Very invasive in other western states, but currently limited in distribution in CA.	YES, Federal and State
<i>Cirsium arvense</i>	Canada thistle	Moderate	FAC	Grasslands, riparian areas, forests. Severe impacts in other western states. Limited distribution in CA.	YES, Federal
<i>Cirsium vulgare</i>	Bull thistle	Moderate	FACU	Riparian areas, marshes, meadows. Widespread, can be very problematic regionally.	YES, Federal
<i>Cirsium</i> spp.	Thistle				YES, Federal
<i>Conium maculatum</i>	Poison-hemlock	Moderate	FACW	Riparian woodland, grassland. Widespread in disturbed areas. Abiotic impacts unknown. Impacts can vary locally.	YES, State
<i>Convolvulus arvensis</i>	Field bindweed				YES, Federal

Cal-IPC: The Inventory Database Scientific Name	Common Name	CAL-IPC Rating	Wetland Indicator Status	Habitats of Concern and Comments	Subject to Invasive Species Performance Criteria
<i>Cortaderia jubata</i>	Jubatagrass	High		Many coastal and interior habitats.	YES, Federal and State
<i>Cortaderia selloana</i>	Pampasgrass	High		Coastal dunes, coastal scrub, Monterey pine, riparian, grasslands, wetlands, serpentine soils. Still spreading both coastally and inland.	YES, Federal and State
<i>Crataegus monogyna</i>	Hawthorn	Limited			-
<i>Cynodon dactylon</i>	Bermuda grass	Moderate	FAC	Riparian scrub in southern CA. Common landscape weed, but can be very invasive in desert washes.	YES, Federal and State
<i>Cynodon</i> spp.	Bermuda grass; stargrass				YES, Federal
<i>Cynosurus echinatus</i>	Hedgehog dogtailgrass	Moderate	UPL	Oak woodland, grassland. Widespread, impacts vary regionally, but typically not in monotypic stands.	-
<i>Cyperus esculentus</i>	Yellow nutsedge				YES, Federal
<i>Cytisus scoparius</i>	Scotch broom	High	UPL	Coastal scrub, oak woodland; horticultural varieties may also be invasive.	YES, Federal and State
<i>Dactylis glomerata</i>	Orchardgrass	Limited	UPL	Grasslands, broadleaved forest, woodlands; common forage species. Impacts appear to be minor.	-
<i>Delawarea odorata</i>	Cape-ivy, German-ivy	High		Coastal, occasionally other riparian areas, common discard from gardens.	YES, State
<i>Dipsacus fullonum</i>	Common teasel	Moderate	NI	Grasslands, seep, riparian scrub. Impacts regionally variable, forms dense stands on occasion.	YES, Federal and State
<i>Elymus caput-medusae</i>	Medusa head				YES, Federal

Cal-IPC: The Inventory Database Scientific Name	Common Name	CAL-IPC Rating	Wetland Indicator Status	Habitats of Concern and Comments	Subject to Invasive Species Performance Criteria
<i>Elymus repens</i>	Couch grass				YES, Federal
<i>Erodium cicutarium</i>	Red-stemmed filaree	Limited			-
<i>Euphorbia oblongata</i>	Eggleaf spurge				YES, Federal
<i>Festuca arundinacea</i>	Tall fescue	Moderate	FAC -	Coastal scrub, grasslands; common forage grass. Widespread, abiotic impacts unknown.	-
<i>Ficus carica</i>	Edible fig	Moderate	UPL	Riparian woodland. Can spread rapidly. Abiotic impacts unknown. Can be locally very problematic.	YES, Federal
<i>Foeniculum vulgare</i>	Fennel	High	UPL	Grasslands, scrub.	YES, Federal
<i>Galega officinalis</i>	goatsrue				YES, State
<i>Genista monspessulana</i>	French broom	High	NI	Coastal scrub, oak woodland, grasslands. Horticultural selections may also be invasive.	YES, Federal and State
<i>Genista</i> spp.	Broom				YES, Federal
<i>Geranium dissectum</i>	Cut-leaf geranium	Moderate			-
<i>Geranium purpureum</i>	Herb robert				YES, Federal
<i>Hedera helix</i> , <i>H. canariensis</i>	English ivy, Algerian ivy	High	UPL	Coastal forests, riparian areas. Species combined because of genetics questions.	YES, State

Cal-IPC: The Inventory Database Scientific Name	Common Name	CAL-IPC Rating	Wetland Indicator Status	Habitats of Concern and Comments	Subject to Invasive Species Performance Criteria
<i>Holcus lanatus</i>	Common velvet grass	Moderate	FAC	Coastal grasslands, wetlands. Impacts can be more severe locally, especially in wetland areas.	-
<i>Hordeum maritimum</i> , <i>H. murinum</i>	Mediterranean barley, hare barley, wall barley	Moderate	FAC	Grasslands; <i>H. maritimum</i> invades drier habitats, while <i>H. murinum</i> invades wetlands. Widespread, but generally do not form dominant stands.	-
<i>Hypericum perforatum</i>	Common St. John's wort, klamathweed	Moderate	UPL	Many northern CA habitats. Abiotic impacts low. Biological control agents have reduced overall impact.	YES, Federal
<i>Hypochaeris glabra</i>	Smooth catsear	Limited	UPL	Scrub and woodlands. Widespread. Impacts appear to be minor. Some local variability.	-
<i>Hypochaeris radicata</i>	Rough catsear, hairy dandelion	Moderate	UPL	Coastal dunes, scrub, and prairie; woodland, forest. Widespread. Impacts unknown or appear to be minor.	-
<i>Isatis tinctoria</i>	Dyer's woad				YES, Federal
<i>Lepidium latifolium</i>	Perennial pepperweed, tall whitetop	High	FACW	Coastal and inland marshes, riparian areas, wetlands, grasslands; potential to invade montane wetlands.	YES, Federal
<i>Lepidium</i> spp.	Hoary cress				YES, Federal
<i>Leucanthemum vulgare</i>	Ox-eyed daisy	Moderate			-
<i>Lolium multiflorum</i>	Italian ryegrass	Moderate	FAC	Grasslands, oak woodland, piñon-juniper woodland; widely used for post-fire erosion control. Widespread. Impacts can vary with region.	-
<i>Lythrum hyssopifolium</i>	Hyssop loosestrife	Limited	FACW	Grasslands, wetlands, vernal pools. Widespread. Impacts unknown but appear to be minor.	YES, State
<i>Lythrum salicaria</i>	Purple loosestrife	High		Wetlands, marshes, riparian areas.	YES, Federal and State

Cal-IPC: The Inventory Database Scientific Name	Common Name	CAL-IPC Rating	Wetland Indicator Status	Habitats of Concern and Comments	Subject to Invasive Species Performance Criteria
<i>Ludwigia</i> spp.	Water primrose/willow				YES, State
<i>Marrubium vulgare</i>	White horehound	Limited	FAC	Grasslands scrub, riparian areas. Widespread. Rarely in dense stands. Impacts relatively minor.	-
<i>Medicago polymorpha</i>	California burdock	Limited	UPL	Grasslands. Widespread weed of agriculture and disturbed areas. Impacts in wildlands minor.	-
<i>Mentha pulegium</i>	Pennyroyal	Moderate	OBL	Vernal pools, wetlands. Poisonous to livestock. Spreading rapidly. Impacts largely unknown.	-
<i>Myriophyllum aquaticum</i>	Parrot feather watermilfoil				YES, Federal
<i>Onopordum acanthium</i>	Scotch thistle	High		Wet meadows, sage brush, riparian areas.	YES, Federal
<i>Onopordum</i> spp.	Thistle				YES, Federal
<i>Oxalis pes-caprae</i>	Bermuda buttercup, buttercup oxalis, yellow oxalis	Moderate	UPL	Coastal dunes, scrub, oak woodland. Impacts in coastal areas may prove more severe in time.	-
<i>Parentucellia viscosa</i>	Yellow glandweed, sticky parentucellia	Limited	NI	Coastal prairie, grassland, and dunes. Impacts unknown, but can be locally significant.	-
<i>Phalaris aquatica</i>	Harding grass	Moderate	FAC +	Coastal sites, especially moist soils. Limited distribution. Can be highly invasive locally.	YES, Federal and State
<i>Phalaris arundinacea</i>	Reed canarygrass	N/A ³	OBL	Valley grassland, foothill woodland, chaparral, yellow pine forest, wetland-riparian habitat.	YES, State

³ Most or all of the extant Reed canarygrass is likely derived from seeding of aggressive European cultivars, according to local sources. It is not known whether native genes or genotypes are also present. Hybrids of the native and European types are generally considered to be aggressive and invasive.

Cal-IPC: The Inventory Database Scientific Name	Common Name	CAL-IPC Rating	Wetland Indicator Status	Habitats of Concern and Comments	Subject to Invasive Species Performance Criteria
<i>Phragmites australis</i>	Common reed			BONAP, Biota of North America, shows this to be present in Mendocino County. Habitat exists in the project area.	-
<i>Phytolacca americana</i>	Common pokeweed	Limited	NI	Riparian forest, riparian woodland.	-
<i>Picris echioides</i>	Bristly oxtongue	Limited	FAC	Coastal prairie, scrub, riparian woodland. Widespread locally. Abiotic impacts unknown.	-
<i>Plantago lanceolata</i>	Buckhorn plantain, English plantain	Limited	FAC	Many habitats. Turf weed primarily. Low density and low impact in wildlands.	-
<i>Poa pratensis</i>	Kentucky bluegrass	Limited	UPL	Grasslands scrub, riparian areas. Widespread turf plant. Abiotic impacts unknown.	-
<i>Polygonum cuspidatum</i>	Japanese knotweed	Moderate	NI	Riparian areas, wetlands, forest edges. More severe impacts in NW wetlands. Distribution limited in CA.	YES, Federal
<i>Polypogon monspeliensis</i> and spp.	Rabbit-foot grass, annual beardgrass	Limited	FACW +	Margins of ponds and streams, seasonally wet places, edge of coastal dunes. Widespread. Impacts appear to be minor.	YES, Federal
<i>Polygonum</i> spp.	knotweed				YES, Federal
<i>Raphanus sativus</i>	Radish	Limited			YES, Federal
<i>Rubus armeniacus</i>	Himalayan blackberry	High	FACW	Riparian areas, marshes, oak woodlands.	YES, Federal and State
<i>Rumex acetosella</i>	Red sorrel, sheep sorrel	Moderate	FAC	Many habitats, riparian areas, forest, wetlands. Widespread. Abiotic impacts unknown. Impacts can vary locally.	-
<i>Rumex crispus</i>	Curly dock	Limited	FACW	Grasslands, vernal pool, meadows, riparian. Widespread. Impacts appear to be minor.	-

Cal-IPC: The Inventory Database Scientific Name	Common Name	CAL-IPC Rating	Wetland Indicator Status	Habitats of Concern and Comments	Subject to Invasive Species Performance Criteria
<i>Salsola tragus</i>	Russian-thistle	Limited	UPL	Desert dunes and scrub, alkali playa. Widespread. Impacts minor in wildlands.	YES, State
<i>Senecio jacobaea</i>	Tansey ragweed	Limited			YES, Federal
<i>Sesbania punicea</i>	Red sesbania, scarlet wisteria	High		Riparian areas.	-
<i>Silybum marianum</i>	Blessed milkthistle	Limited	UPL	Grasslands, riparian. Widespread, primarily in disturbed areas. Impacts can be higher locally.	-
<i>Sinapis arvensis</i>	Wild mustard, charlock	Limited	UPL	Grasslands. Primarily in disturbed sites. Impacts minor or unknown in wildlands.	-
<i>Sonchus arvensis</i>	Field sowthistle				YES, Federal
<i>Sorghum halepense</i>	Johnsongrass				YES, Federal
<i>Spartium junceum</i>	Spanish broom	High		Coastal scrub, grasslands, wetlands, oak woodland, forests	YES, Federal and State
<i>Taeniatherum caput-medusae</i>	Medusahead	High	UPL	Grasslands, scrub, woodland.	YES, State
<i>Tamarix parviflora</i>	Smallflower tamarisk	High		Riparian areas, desert washes, coastal scrub.	YES, State
<i>Tamarix ramosissima</i>	Saltcedar, tamarisk	High		Desert washes, riparian areas, seeps and springs.	YES, State
<i>Tonin arvensis</i>	Hedgeparsley	Moderate	UPL	Expanding range. Appears to have only moderate ecological impacts.	-

Cal-IPC: The Inventory Database Scientific Name	Common Name	CAL-IPC Rating	Wetland Indicator Status	Habitats of Concern and Comments	Subject to Invasive Species Performance Criteria
<i>Trifolium hirtum</i>	Rose clover	Moderate	UPL	Grasslands, oak woodland. Widely planted in CA. Impacts relatively minor in most areas.	-
<i>Verbascum thapsus</i>	Common mullein, woolly mullein	Limited	UPL	Meadows, riparian, sagebrush, pifton-juniper woodlands. Widespread. Impacts minor.	-
<i>Vinca major</i>	Big periwinkle	Moderate	UPL	Riparian, oak woodlands, coastal scrub. Distribution currently limited but spreading in riparian areas. Impacts can be higher locally.	YES, State
<i>Vulpia myuros</i>	Rattail fescue	Moderate	UPL	Coastal sage scrub, chaparral. Widespread. Rarely forms monotypic stands, but locally problematic.	-
OBL = Obligate. FACW = Facultative Wetland. FAC = Facultative. UPL = Upland. NI = No Indicator Status.					

WEED MANAGEMENT HANDOUTS:

- **FORM: REPORT OF CHEMICAL SPRAY
OPERATIONS**

For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

CONTRACTOR	WEEK ENDING DATE	PROJECT DESCRIPTION				PROJECT NUMBER
		A	B	C	D	
CHEMICAL MIXTURE AND PERCENT ACTIVE MATERIAL						
WATER RATE						
APPLICATION PER SQUARE FOOT OR ACRE						

[illegible]

CONTRACTOR'S REPRESENTATIVE

COPY TO: DISTRICT

WEED MANAGEMENT HANDOUTS:

- **HERBICIDE USE PLAN**

Herbicide Use Plan
For
Highway 101 - Willits Bypass
Off-site Riparian and Wetland Mitigation Lands
WDID No. 1B10019WNME

Men-101-PM 43.1/52.3
EA 01-26200 EFIS 0100060005

Prepared by:

Monica Finn 9/25/2014
Monica Finn, Revegetation Specialist
Caltrans North Region

Approved by:

Carolyn Brown 9-25-14
Carolyn Brown, Branch Chief
North Region Office of Environmental Stewardship

INTRODUCTION/BACKGROUND

The California Department of Transportation (Caltrans) has committed to controlling invasive species and establishing riparian vegetation on the Willits Bypass off-site wetlands and riparian mitigation lands, as part of the roadway project's Mitigation Monitoring Plan (MMP) commitments associated with the project's regulatory permits. There are 32 plant species that have been identified which are subject to invasive species performance criteria (Table 8.1, attached), as part of the successful establishment and rehabilitation of mitigation lands. Most of these plants can be controlled with manual means.

Himalayan blackberry (*Rubus armeniacus*), which occupies approximately 67.0 acres of the mitigation lands, is an aggressive, non-native plant that spreads vegetatively and forms large impenetrable stands. The dense thickets make it extremely difficult to cut by hand and require a long treatment time to have an effect. Canes can grow 23 feet in a single season, forming new rooting points along the way. Root crowns can be up to eight inches in diameter, and individual roots have been measured more than 35 feet long, with suckers (new plants) arising from as much as 1.5 feet deep. Manual cutting will take 3-5 years, to as many as 7 years before blackberry plants are controlled to a point that mitigation planting can occur and planting areas would be free from the disturbance of weed control activities (Bennett, 2007 and personnel communication with Restoration Contractors, 2014). Himalayan blackberry is currently growing over large areas of Riparian Rehabilitation and Establishment mitigation areas, covering an estimated 67.0 acres of the total 288.0 acres (see attached Target Weed Maps). With multi-year treatment needs and the large acreage to treat, planting in Rehabilitation and Establishment areas will need to be delayed several years until the blackberry can be controlled.

PROPOSED ACTION

Caltrans is requesting approval to use pesticides (i.e. herbicides) to treat Himalayan blackberry on the Willits Bypass off-site mitigation lands. Caltrans is proposing to manually cut back the blackberries and then apply pesticides on re-sprouts. Pesticide use would be targeted to blackberry plants only and limited to application using a wand (chemical wiping) or by painting. The expectation is to treat re-sprouts over the entire blackberry occurrence acreage the first year, with decreasing treatment needs and decreasing treatment acreage each year, over the 3-year plant establishment period. There will be no aerial spraying allowed. Any chemical approved shall be safe for aquatic sites. Blackberries are concentrated on upper creek banks, but extend into adjacent meadows, wetlands and fields. Treatment is proposed for late summer and fall when water is not present. Application will not be allowed when surface water is present.

JUSTIFICATION

The combination of manual cutting, followed by pesticide treatment on re-sprouts is currently considered to be the most effective strategy for controlling Himalayan blackberry. Caltrans believes there is a compelling reason to use herbicides on blackberry, based on the tenacious nature and growth pattern of this plant, the substantial occurrence on the mitigation lands (in acres, see attached Target

Weed Maps) and the delay to the planting schedule that manual removal would require. Best Management Practices will be implemented through the mitigation project standard specifications.

BEST MANAGEMENT PRACTICES:

Contract specifications will include the requirements for:

1. Limiting herbicide use to the targeted treatment of Himalayan blackberry, in the areas shown on the Target Weed Maps, attached.
2. Limiting the application to a hand method using a wand or painting.
3. Prohibiting the use of aerial spraying.
4. Prohibiting the use of chemicals when surface water is present.
5. Herbicides should not be applied if rain is forecast prior to the proposed application event.
6. Limiting the use of approved chemicals to only those approved safe for aquatic sites. Labels for. Examples of pesticides that would be acceptable for use on the mitigation lands are, two glyphosate products, Rodeo and Aquamaster and two Imazapy based chemicals Stalker and Habitat.
7. The contractor to submit a copy of the licensed pest control adviser's recommendation, at least 60 days before the start of work, or the proposed application of any pesticide for Caltrans and Water Board review and approval.
8. The pest control adviser's recommendation will be prepared for all pesticide under the Food and Agriculture Code, and must include the pesticides to be used, rates of application, methods of application and application areas.
9. Upon award of the mitigation contracts, the Contractor will prepare a Weed Management Plan, which will address all weed control activities on the project. This plan will incorporate the recommendations of the pest control adviser, along with specific contact information of the applicator(s), schedule of proposed chemical use, general time period and location of expected use, description of the treatment area, application method, amount of product to be used, any water use restrictions or precautions during use, measures to prevent pesticide spills, and a plan for education of the applicators and staff on potential adverse effects of the pesticide application. The Weed Management Plan will be submitted to Caltrans and the Water Board for review and approval.
10. The pesticide applicator to have an active and valid qualified applicators license or certificate for the Department of Pesticide Regulation.
11. Pesticides must comply with the Department of Pesticide Regulation.
12. The contractor to submit a copy of the registered label for the pesticide, before mixing a pesticide. If the contractor is unable to provide a copy, the Construction Engineer will be allowed to read the label on the container.
13. The contractor to mix and apply pesticides under the requirement of the Department of Pesticide Regulation and the instructions on the pesticide product label.
14. Pesticides cannot be applied on Saturdays and holidays unless authorized.
15. Pesticides cannot be used whenever weather and wind conditions are unsuitable for application.

16. Use of a pesticide with a photosensitive dye that produces a contrasting color when applied. The dye must not stain surfaces or injure plants or wildlife when applied at the manufacturer's recommended application rate.
17. The Construction Engineer must be notified of pesticide application times at least 24 hours before each application.
18. At the end of each week, when pesticides are used, the contractor will submit a report documenting the application of all pesticides as an informational submittal. This information will be provided to Caltrans using the Caltrans form, Report of Chemical Spray Operations.

WEED MANAGEMENT HANDOUTS:

- **CALTRANS APPROVAL LIST FOR CHEMICALS**

CALTRANS APPROVED CHEMICAL LIST

IMMS Part Number	EPA Registration	Product Name	Active Ingredient	Signal Word	Manufacturer	CDPR Approval Date
HERBICIDES						
6840-10364	62719-556-AA	Accord XRT II	50.2% Glyphosate	Caution	Dow AgroSciences LLC	09/22/08
6840-11683	524-343-ZF	AquaMaster	53.8% Glyphosate	Caution	Monsanto Company	11/02/00
6840-13853	62719-572-ZB	Capstone	16.22% Triclopyr 2.22% Aminopyralid	Caution	Dow AgroSciences LLC	06/29/12
6840-17852	62719-542-AA	Dimension 2EW	24.0% Dithiopyr	Warning	Dow AgroSciences LLC	05/23/07
6840-17801	62719-445-ZA	Dimension Ultra 40 WP	40.0% Dithiopyr	Caution	Dow AgroSciences LLC	02/27/03
6840-17864	62719-426-ZB	Dimension EC	12.7% Dithiopyr	Caution	Dow AgroSciences LLC	04/03/03
6840-17155	279-3452-AA	Dismiss CA	39.6% Sulfentrazone	Caution	FMC Corporation	03/20/13
6840-19250	62719-40-ZC	Element 4	61.6% Triclopyr	Caution	Dow AgroSciences LLC	02/02/07
6840-19401	432-1516-AA	Esplanade 200 SC	19.0% Indaziflam	Caution	Bayer Environmental Sci.	23/04/12
6840-16001	83220-2-AA	EZ-Ject Copperhead	83.5% Imazapyr	Caution	EZ-Ject Inc.	01/23/07
6840-21468	100-1084-AA	Fusilade II Turf & Orn	24.5% Fluazifop-P-Butyl	Caution	Sygenta Crop Protection	01/09/03
6840-11430	62719-658-AA	Gallery SC	45% Isoxaben	Caution	Dow AgroSciences LLC	04/25/14
6840-21443	62719-145-AA	Gallery 75 DF	75.0% Isoxaben	Caution	Dow AgroSciences LLC	03/28/96
6840-21583	66222-28-AA	Galigan 2E	22.2% Oxyfluorfen	Warning	Makhteshim-Agan of N. America Inc.	09/19/00
6840-21633	62719-527-AA	Garlon 4 Ultra	60.5% Triclopyr	Caution	Dow AgroSciences LLC	02/06/07
6840-21759	62719-424-AA	Goal 2XL	22.3% Oxyfluorfen	Warning	Dow AgroSciences LLC	12/03/02
6840-19161	62719-447-ZA	Goatender	41.0% Oxyfluorfen	Caution	Dow AgroSciences LLC	08/25/04
6840-21951	241-426-AA	Habitat	28.7% Imazapyr	Caution	BASF Corporation	08/30/05
6840-23841	352-645-AA	Landmark XP	50.0% Sulfometuron-Methyl 25.0% Chlorsulfuron	Caution	DuPont De Nemours & Co.	03/15/06
6840-23981	62719-305-AA	Lontrel Turf & Orn	40.9% Clopyralid	Caution	Dow AgroSciences LLC	01/24/00
6840-24502	352-556-AA	Matrix	25.0% Rimsulfuron	Caution	DuPont De Nemours & Co.	01/25/96
6840-24514	352-768-AA	Matrix SG	25.0% Rimsulfuron	Caution	DuPont De Nemours & Co.	01/06/09
6840-25657	62719-519-AA	Milestone	40.6% Aminopyralid	Caution	Dow AgroSciences LLC	10/04/06
6840-25606	62719-537-AA	Milestone VM	40.6% Aminopyralid	Caution	Dow AgroSciences LLC	10/05/06
6840-25772	62719-572-AA	Milestone VM Plus	16.2% Triclopyr 02.2% Aminopyralid	Caution	Dow AgroSciences LLC	03/13/08
6840-27636	352-601-AA	Oust XP	75.0% Sulfometuron-Methyl	Caution	DuPont De Nemours & Co.	08/01/00
6840-27206	524-500-AA	Outrider	75.0% Sulfosulfuron	Caution	Monsanto Company	01/08/07

CALTRANS APPROVED CHEMICAL LIST

HERBICIDES - Continued						
6840-28083	62719-176-ZA	Pathfinder II	13.6% Triclopyr, Butoxyethyl Ester	Caution	Dow AgroSciences LLC	04/20/95
6840-28133	241-416-AA	Pendulum AquaCap	38.7% Pendimethalin	Caution	BASF Corporation	07/15/03
6840-11416	100-950-ZB	Pennant Magnum	83.7% S-metolachlor	Caution	Sygenta Crop Protection Inc.	02/07/12
6840-28145	352-846-AA	Perspective	39.5% Aminocyclopyrachlor 15.8% Chlorsulfuron	Caution	DuPont De Nemours & Co.	01/13/14
6840-28208	62719-611-AA	Pindar GT	0.85% Penoxsulam 40.31% Oxfluorfen	Caution	Dow AgroSciences LLC	19/07/10
6840-29186	7969-58-AA	Poast	18.0% Sethoxydim	Warning	BASF Corporation	05/20/83
6840-11404	279-3452-AA-2935	Portfolio 4F California	39.6% Sulfentrazone	Caution	Wilbur-Ellis Company	03/26/14
6840-13105	279-3370-ZA-2935	Portfolio 4F CA	39.6% Sulfentrazone	Caution	Wilbur-Ellis Company	04/15/10
6840-25760	524-535-AA	Quik Pro	73.3% Glyphosate 02.9% Diquat dibromide	Caution	Monsanto Company	07/30/02
6840-30493	100-1091-AA	Reward Lndsp & Aq.	37.3% Diquat Dibromide	Caution	Sygenta Crop Protection Inc.	09/17/02
6840-30479	62719-324-ZB	Rodeo	53.8% Glyphosate	Caution	Dow AgroSciences LLC	06/19/02
6840-30517	432-1465-AA	Ronstar Flo	34.1% Oxadiazon	Caution	Bayer Environmental Sci.	01/25/08
6840-30529	524-343-ZG	Roundup Custom	53.8% Glyphosate, Isopropylamine	Caution	Monsanto Company	01/01/13
6840-30543	524-475-ZA	Roundup Pro	41.0% Glyphosate	Caution	Monsanto Company	10/26/95
6840-25796	524-529-AA	Roundup Pro Con.	50.2% Glyphosate	Caution	Monsanto Company	06/01/01
6840-30556	524-505-AA	Roundup ProDry	71.4% Glyphosate	Caution	Monsanto Company	01/12/00
6840-30568	524-579-AA	Roundup ProMax	48.7% Glyphosate	Caution	Monsanto Company	10/29/08
6840-10453	81880-1-AA-10163	SedgeHammer	75.0% Halosulfuron-Methyl	Caution	Gowan Company	06/12/05
6840-31851	2217-835-AA	Speedzone Southern	0.54% Carfentrazone-ethyl 10.49% 2,4-D, 2-ethylhexyl ester 2.66% Mecoprop-p acid 0.67% Dicamba acid	Caution	PBI / Gordon Corporation	05/28/03
6840-32206	228-408-ZA	Spyder	75.0% Sulfometuron-Methyl	Caution	NuFarm America's Inc.	09/24/09
6840-13410	241-398-ZA	Stalker	27.6% Imazapyr	Caution	BASF Corporation	04/30/01
6840-33121	70506-44-AA	Surflan AS Specialty	40.4% Oryzalin	Caution	United Phosphorus, Inc.	02/19/04
6840-33424	352-654-AA	Telar XP	75.0% Chlorsulfuron	Caution	DuPont De Nemours & Co.	11/28/06
6840-34186	62719-259-AA	Transline	40.9% Clopyralid	Caution	Dow AgroSciences LLC	09/16/97
6840-34642	62719-258-AA	Turfion Ester	61.6% Triclopyr, Butoxyethyl Ester	Caution	Dow AgroSciences LLC	01/31/95

CALTRANS APPROVED CHEMICAL LIST

PLANT GROWTH REGULATORS				
6840-19387	2217-759-AA	Embark 2-S	28.0% Mefluidide, Diethanolamine Salt	Cautious
				PBI / Gordon Corporation
				02/24/89

TREE GROWTH REGULATORS				
6840-29402	67690-22-AA	Profile 2SC	21.8% Paclobutrazol	Cautious
				Seagro Corporation
				07/28/04

BIOLOGICAL CONTROL - USE BY VECTOR CONTROL AGENCIES ONLY				
Not applicable (Do Not Buy)	73049-20-AA	Vectorex CG Biological Larvicide	7.5% Bacillus Sphaericus, Serotype H-5A5B, Strain 2362	Cautious
				Valent Biosciences Corporation
				03/15/01

INSECTICIDES AND RODENTICIDES				
6840-21381	12455-91-AA	Final Rodenticide Ready-to-Use Place Pack	0.005% Brodifacoum	Cautious
				Bell Laboratories, Inc.
				01/07/98
6840-33362	36029-17-AA	Ground Squirrel Bait by Wilco Ag - Restricted Use	0.005% Diphacinone	Cautious
				Wilco Distributors
				09/11/06
6840-22179	7946-16-AA	Imicide (4 ML) package	10.0% Imidacloprid	Cautious
				J.J. Mauget Company
6840-22181	7946-16-AA	Imicide (3 ML) package	10.0% Imidacloprid	Cautious
				J.J. Mauget Company
				09/30/96
6840-24209	7173-189-AA	Maki Paraffin Blocks Rat Bait	0.005% Bromadiolone	Cautious
				LiphaTech Inc.
				03/26/84
6840-30378	10955-50003-ZA	Rodent Bait Diphacinone Treated Grain	0.01% Diphacinone	Cautious
				California Dept of Food & Ag. Yolo County
				04/18/89
6840-30455	10955-50001-ZA	Rodent Bait Diphacinone Treated Grain	0.005% Diphacinone	Cautious
				California Dept of Food & Ag. Yolo County
				04/18/89
6840-33323	61282-24-AA-79717	Sierra Squirrel Bait	0.005% Diphacinone	
				Sierra Industries Inc.
				01/28/04
6840-25428	432-1318-AA	Merit 75 WSP Insect.	75.0% Imidacloprid	Cautious
				Bayer Environmental Science
				05/07/04
6840-30707	66622-199-AA	QP Imidacloprid 75WSB	75.0% Imidacloprid	Cautious
				Makhteshim Agan
				09/11/10

CALTRANS APPROVED CHEMICAL LIST

FERTILIZERS				
8720-10107	2217-643-ZC-7001	Turf Supreme 16-6-8 Plus Trimec	0.55% 2,4 Dichlorophenoxyacetic Acid 0.12% (2 Methyl-4-Chlorophenoxy) Propionic Acid 0.05% Dicamba: 3,6-Dichloro-O-Anisic Acid	Caution J.R. Simplot Company

WEED MANAGEMENT HANDOUTS:

- **CALTRANS APPROVAL LIST FOR ADJUVANT**

CALTRANS APPROVED ADJUVANT LIST

ADJUVANTS

IMMS Part Number	EPA Registration #	Product Name	Principal Functioning Agents	Signal Word	Manufacturer	CDPR Approval Date
6840-10313	34704-50034-AA	Activator 90	90.0% Alkylphenol Ethoxylate, Alcohol Ethoxylate and Tall Oil Fatty Acid	Caution	Loveland Products Inc.	07/13/04
6840-10402	5905-50094-AA	Agri-Dex	99.0% Heavy Range Paraffinic Oil, Polyol Fatty acid Esters, and Polyethoxylated Derivatives Thereof	Caution	Helena Chemical Company	06/05/02
6840-12836	34704-50026-AA	Attach	100% Pinen Polymers, Petrolatum, Omega-Hydroxypoly	Caution	Loveland Products Inc.	01/29/04
6840-14311	1050775-50024-AA	CMR Can-Hance	100% Methylated Canola Oil, Polyalkyleneoxide Heptamethyltrisilxane, Alkylphenol Ethoxylate	Caution	Creative Mktg & Research Inc.	07/23/96
6840-15389	1050775-50020-AA	CMR Herbicide Activator	100% Petroleum Distillate and Alkyl Phenol Ethoxylate	Caution	Creative Mktg & Research Inc.	08/07/86
6840-15403	2935-50173-AA	Competitor	98.0% Ethyl Oleate, Sorbitan Alkylpolyethoxylate Ester, Dialkyl Polyoxyethylene Glycol	Caution	Wilbur-Ellis Company	09/09/04
6840-10527	2935-50186-AA	Crosshair	100% Modified Seed Oils, Amine Salts of Organic Acids, and Organic Acid	Caution	Wilbur-Ellis Company	06/10/11

CALTRANS APPROVED ADJUVANT LIST

ADJUVANTS - Continued

6840-17650	1051080-50021-AA	Drift Stop	88% Acrylamide-Sodium Acrylate Copolymer, Petroleum Distillates, Hydrotreated Light Naphthenic Distillate	Caution	Custom Ag Formulators Inc.	10/11/00
6840-19502	73427-50001-AA	EP Base Oil Plus	100 % Paraffin Oil, Alcohol Ethoxylate, Tall Oil Fatty Acids	Caution	Eco-Pak LLC	09/26/13
6840-21924	5905-50105-AA	Grounded-W	85.0% Mineral Oil 15.0% Polyoxyethylene Sorbitan Fatty acid Ester	Caution	Helena Chemical Company	01/02/14
6840-22003	2935-50160-AA	Hasten Spray	100% Ethyl Oleate, Polyethylene Dialky Ester, Ethoxylated Nonylphenol	Caution	Wilbur-Ellis Company	04/28/94
6840-22256	5905-50091-AA	Induce	90.0% Alkyl Aryl Polyoxylkane Ethers and Free Fatty Acids	Warning	Helena Chemical Company	04/18/02
6840-22306	5905-50099-AA	Inlet	90.0% Polyalkoxylated and Non-Alkoxylated Aliphatics and Derivatives Therof	Caution	Helena Chemical Company	01/22/07
6840-22155	2935-50169-AA	In-Place Drift Control	100% Modified Vegetable Oil, Aliphatic Mineral Oil, Amine Salts of Organic Acids, Aromatic Acid	Caution	Wilbur-Ellis Company	02/08/01
6850-11428	2935-50195-AA	NIS-EA Nonionic Surfactant	98% Polyoxyethylene polyol fatt acid ester, butyl lactate	Caution	Wilbur-Ellis Company	6/24/2014

CALTRANS APPROVED ADJUVANT LIST

ADJUVANTS - Continued

6840-30113	1050775-50022-AA	Pro-Spreader Activator	90.0% Alkyl Phenol Ethoxylate, Isopropanol, Fatty Acids	Caution	Creative MKTG & Research	01/20/89
6840-30137	5905-50076-AA	Quest	48.8% Hydroxy Carbocyclic, Phosphoric Acids, and Ammonium Salts. 1.0% Polyacrylic Acid	Caution	Helena Chemical Company	03/22/96
6840-30101	2935-50142-AA	R-11 Spreader Activator	90% Alkylphenol Ethoxylate, Butyl Alcohol, Dimethylpolysiloxane	Warning	Wilbur-Ellis Company	06/09/77
6840-30606	34704-50045-AA	Reign Drift	01.0% Polyvinyl Polymer	Caution	Loveland Products	10/27/05
6840-31610	5905-50104-AA	Smoke	56.4% Trihydroxy Carboxylic Acid, Alkyl Amine Alkoxylate, Alkyl Alkoxylated Phosphate Amine, Urea Sulfuric Acid Complex	Caution	Helena Chemical Company	10/29/13
6840-32319	65328-50001-AA	SprayTech Oil	95.0% Emulsifiable Soybean Oil	Warning	SprayTech Inc.	09/12/91
6840-32408	2935-50170-AA	Super Spread 7000	70.0% Alkyl Aryl Polyoxyethylene, Ethoxylated Alcohols, and Aliphatic Acid	Caution	Wilbur-Ellis Company	06/04/02
6840-10414	2935-50176-AA	Super Spread MSO	100% Methyl Soyate, Nonylphenol Ethoxylate Blend	Caution	Wilbur-Ellis Company	07/20/06
6840-32459	5905-50088-AA	Surfix-P	96% Bata Pinene Polymers	Caution	Helena Chemical Company	06/06/01

CALTRANS APPROVED ADJUVANT LIST

ADJUVANTS - Continued

IMMS Part Number	EPA Registration #	Product Name	100% Heptamethyltrisiloxane, Ethoxylated Acetate, Polyethylene Glycol Monallyl Acetate, Ployethylene Glycol Diacetate	Warning	Wilbur-Ellis Company	06/02/94
6840-33311	2935-50161-AA	Sylgard 309				

DYES

IMMS Part Number	EPA Registration #	Product Name	Manufacturer
6820-00005	Exempt	Dyes	
6820-00106	Exempt	Turf Mark Blue Liquid	Becker-Underwood
6820-10107	Exempt	ER 10 Green	Geigy
6820-10121	Exempt	Blazon Blue	Blazon
6820-10145	Exempt	Blazon Blue	Blazon
6820-10208	Exempt	Blazon EZ Pak	Blazon
6820-10158	Exempt	Blazon Liquid dye	Blazon
6820-10160	Exempt	Green Marker Dye	
6820-10172	Exempt	Hi-light WSP	Hi-light
6820-10184	Exempt	Marker Lt. Green	
6820-10196	Exempt	Hi-light WSP Gr/Bl.	Becker-Underwood
6820-10259	Exempt	Hi-Light Blue	Becker-Underwood
6820-10350	Exempt	Hi-light Red dye	Becker-Underwood
6820-10309	Exempt	Red dye	
6820-00056	Exempt	Bullseye	Milliken
6820-00068	Exempt	Mark-it Blue	Monterey
6820-00070	Exempt	Super Tracer Dye	Growmore
6820-00082	Exempt	Turf Mark Blue (WSP)	Becker-Underwood
6820-00094	Exempt	Turf Trax United	Horticulture

Office of Maintenance Landscape and Litter Abatement - September 2014

onramp.dot.ca.gov/hq/maint/roadside/integrated_Vegetation_Mgmt.shtml

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CHEMICAL AGENTS

IMMS Part Number	EPA Registration #	Product Name	Principal Functioning Agents	Signal Word	Manufacturer	CDPR Approval
6850-00364		Bio-Guard Barrier				
6850-00022	72-50005-AA	Foam Fighter	10% Dimethyl silicone fluid emulsion	Caution	Miller	
6850-00388		Gypsum	Calcium sulfate dihydrate			
6850-00287		No Foam A Defoamer			CMR / Monterey	
6850-00299		No Foam B Defoamer			CMR / Monterey	
6850-00313	2935-50137-ZA	No Foam Defoamer	Polydimethylsiloxane and silicone	Caution	Wiblur-Ellis Company	
6850-11431		Nutra-sol				
6850-00046	1050775-50023-AA	Tripleline Foam-away			CMR	
6850-00275	34704-50062-AA	Unfoamer			Loveland Products	